Human Resources Division

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Introduction to Human Resource Data in the Information Warehouse

Created On: April 9, 1998 Last Updated: July 1, 1998 s:\hrd\training\paris\title.doc

Part I – Introduction

Part II – What is the HR Data in the Warehouse?

Query 1 – How many employees and FTE's does my department employ?
Query 1a – How many employees and FTE's does my department employ by appropriation?
Query 1b – How many employees and FTE's does my department employ by bargaining unit?

Query 2 – Who are the individuals currently employed by my department?
Query 2a – Who are the individuals currently employed by my department by a specific bargaining unit?
Query 2b – Who are the individuals currently employed by my department by position title?
Query 2c – Who are the individuals currently employed by my department by pay title?

Query 3 – How many systems analysts were employed in my department on December 10, 1997?

Query 4 – What are the actual payroll costs for my Department?

Appendices

1. How to obtain Warehouse Security

2. Using Access 2.0 (Windows 3.1) in the Information Warehouse
3. Using Access 7.0 (Office '95) in the Information Warehouse
4. Using Access '97 (Office '97) in the Information Warehouse

5. Building a Query with HR Data in the Warehouse

6. Understanding Query Operators & Summary Calculations
7. Creating a Parameter Query using Access
8. Using the Expression Builder in Access
9. Creating a Make Table in Access
10. Creating an Append Query in Access
11. Creating a Report with the Report Wizard in Access

12. Exporting Query Results from Access to Excel
13. Using Excel 5.0 to access the Warehouse
14. Using Excel 97 to access the Warehouse

15. Glossary of Key Terms

16. Exploring the Data Dictionary

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Objectives

As a result of this session you will be able to:

1. Understand what the Human Resource Data is in the Warehouse.

2. Become familiar with the table structure of HR Data in the Warehouse.

3. Learn how to access HR Data in the Warehouse.

4. Learn how to build queries from the HR Data in the Warehouse.

5. Understand the Information Warehouse structure.

6. Know where to seek help for questions about the Warehouse.

7. Know how to connect to the Information Warehouse.

Introduction to Human Resource Data

PARIS has provided state managers with work force information they need to make organizational and policy decisions. It provided crucial aggregate data about "How Many" and "How Much" from a variety of perspectives. PARIS displayed information on:

- employee
- salary and earnings levels by organization
- appropriation account
- source of funds
- bargaining unit
- job title
- gender
- age
- years of service

Using uniform, statewide definitions and drawing from all three of the state's major payroll systems as well as MMARS and other central systems, PARIS was the first Executive Information System suitable for both oversight and departmental use. PARIS security limited users to data for which they have appropriate access.

THE CHANGE...

Human Resource Data in the Information Warehouse

HR Data Tables and Views

In 1997 the Commonwealth initiated a project that would allow departments to access Human Resource Data using that Information Warehouse. The information formerly available in PARIS screens can now be accessed by ad-hoc query and reporting tools from a desktop personal computer. Organization and format of the available data is at the discretion of an Information Warehouse user rather than limited, pre-formatted informational screens. Users may select, set criteria and aggregate personnel related fields as necessary to meet business requirements.

For example, employment inquires take on a new meaning when asking a variety of questions.

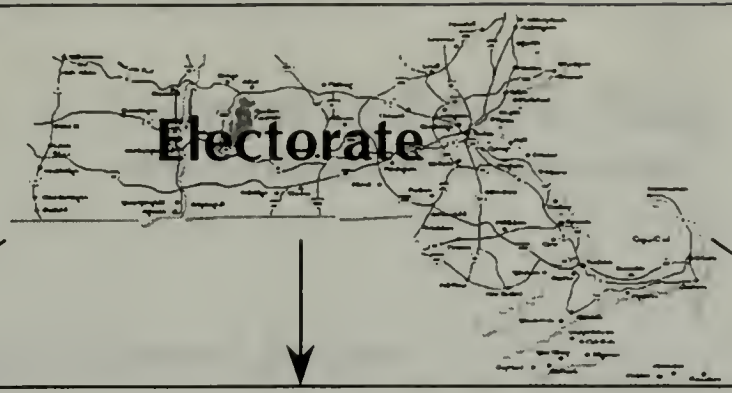
PARIS EM Screen: In which organization does Person X currently work?
HR Data in the Warehouse: What is the work history of Person X in the Commonwealth?

A single query can yield every record in the course of an individual's employment including all changes in position, department, pay organization, account, position number, title or salary.

There are over 20 additional reference, detail, and summary tables within the Warehouse that can provide information to:

- chief fiscal officers
- budget analysts
- personnel managers
- payroll supervisors
- human resource personnel

empowering them to review and report on the status of their most important resource – personnel.



Legislative Branch

House of Representatives
Senate
Joint Legislature

Executive Branch

Governor
Lieutenant Governor
Governor's Council
Executive Council
Inspector General
Attorney General
Office of the Comptroller
State Auditor
State Attorney
State Treasurer
Campaign & Political Finance
District Attorneys
Ethics Committee
Disabled Person Protection Committee
Independent Office & Commissions

Judicial Branch

Supreme Judicial Court
Appeals Court
Trial Court
Board of Bar Examiners
Judicial Conduct Commission
Committee of Public Counsel
Mental Health Legal Advisors

State Agencies

<u>Administration and Finance</u>
Executive Office for Administration & Finance
Appellate Tax Board
Budget Bureau
Capital Planning and Operations
Civil Service Commission
Commission Against Discrimination
Department of Revenue
Department of Veteran Services
Developmental Disabilities
Division of Administrative Law Appeals
Group Insurance Commission
Human Resources Division
Information Technology Division
Operational Services Division
Public Employee Retirement Administration
State Office of Affirmative Action
Teacher's Retirement Board

<u>Consumer Affairs</u>
Office of Consumer Affairs & Business
Alcohol Beverages Control Commission
Board of Medicine
Department of Public Utilities
Division of Banks
Division of Insurance
Division of Registration
Division of Standards
Energy Facilities Setting Council
Massachusetts Cable Television Commission
State Racing Commission

<u>Economic Development</u>
Department of Economic Development
Division of Energy Resources
Division of Housing & Community Development

<u>Education</u>
Department of Education
Higher Education
State & Community Colleges
University System

<u>Elder Affairs</u>
Executive Office of Elder Affairs

<u>Environmental Affairs</u>
Executive Office of Environmental Affairs
Department of Environmental Management
Department of Food & Agriculture
Fisheries & Wildlife Environmental Law
Low Level Radioactive Waste
Metropolitan District Commission
State Reclamation Board

<u>Health & Human Services</u>
Executive Office of Health & Human Services
Department of Medical Assistance
Department of Medical Security
Department of Mental Health
Department of Mental Retardation
Department of Public Health
Department of Social Services
Department of Transitional Assistance
Department of Youth Services
Division of Health Care, Finance & Policy
Massachusetts Commission for the Blind
Massachusetts Commission for the Deaf & Hard of Hearing
Massachusetts Rehabilitation Commission
Office for Refugees & Immigrants
Office for the Children
Soldier's Homes

<u>Labor</u>
Department of Labor & Work Force Development
Conciliation & Arbitration
Department of Labor & Industries
Division of Industrial Accidents
Joint Labor Management Committee
Labor Relations Committee

<u>Public Safety</u>
Executive Office of Public Safety
Architectural Access Board
Board of Building Regulation
Chief Medical Examiner
Committee on Criminal Justice
Criminal History Systems Board
Criminal Justice Training Council
Department of Correction
Department of Fire Services
Department of Public Safety
Department of the Police
Governor's Highway Safety Bureau
Massachusetts Emergency Management Agency
Massachusetts Firefighting Academy
Merit Rating Board
Military Division
Parole Board
Registry of Motor Vehicles

<u>Transportation & Construction</u>
Executive Office of Transportation & Construction
Massachusetts Aeronautics Commission
Massachusetts Highway Department

Sources of PARIS Data

otherwise referred to as source systems

CAPS = C

Commonwealth Automated Payroll System

- Tracks Payroll Data from:
  - the Judiciary Staff.
  - the Legislative Staff.
  - Constitutional Offices.
  - Higher Education Staff EXCEPT UMASS.
- Updated Monthly –
  - in the latter part of the month data is sent through the last Saturday of the CURRENT month.
- This means that the data is sometimes current for a date that has not yet occurred.

HRMIS = H

Human Resources Management Information System

- Maintains personnel information for all UMASS staff.
- Updated Weekly
  - Wednesday night data is sent from the previous Saturday.
  - The update is available on Thursday morning.

PMIS = P

Personnel/Payroll Management Information System

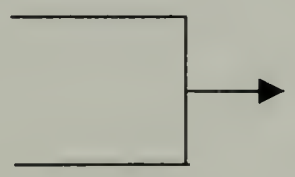
- Executive Department's database.
- Lists personnel.
- Lists salary.
- Lists payroll information for this population.
- Updated weekly
  - Wednesday night data is sent from the previous Saturday
  - The update is available on Thursday morning

YOU ARE ABLE TO "JOIN" HR DATA TABLES TO OTHER SOURCES WITHIN THE INFORMATION WAREHOUSE:

MMARS

Massachusetts Management Accounting & Reporting System

- Appropriation_Allocation
- Appropriations
- Accounting_Line



It is a helpful option to be able to link HR data in the Warehouse to MMARS financial data.

Definitions & Concepts for HR Data in the Warehouse

Work Assignment is generated if all of the following conditions exist:

- A person assigned to a position within an agency
- A person must be identified with a specific pay organization
- A person assigned to a particular account for that agency

Note: ***If changes occur to any of these attributes, a new work assignment is generated.***

Employee

- anyone who is associated with a position **AND**
- is eligible to receive compensation AA subsidiary (object codes A01 through A16)

FTE - Full Time Equivalent – defined in terms of a specific work assignment

- FT – Full Time = work assignments whose FTE value = 1
- PT – Part Time = work assignments whose FTE value = 0.50 to 0.99
- LT – Less than 1/2 Time = work assignment whose FTE value = 0.01 to 0.49

Note: *The value of the normal hours of a particular work assignment (authorized by the position NUMBER) divided by the hours authorized to the position TITLE (as determined by the title's bargaining unit).*

Example: *Bargaining Unit 06 authorizes a programmer to work 37.5 hours per week, but Lucy Smith's position was established as part time 30 hours per week.*
Lucy's FTE value is 30/37.5 = 0.8

Salary vs. Earnings

Earnings are comprised of the actual amount paid to an employee on any given week.
Earnings must take into account day for which an employee was paid.
Earnings must take into account days for which an employee was not paid.

Salary is comprised of Base Salary Amount & Other Salary Amount.
Salary is determined by Salary Type Codes.
Salary is the weekly dollar amount a person is regularly scheduled to receive within a normal pay cycle when no exceptions are posted.

BASE SALARY CODES:		**OTHER SALARY CODES:**	
PMIS:	BAS or SAL	**PMIS:**	ADP, CAP, EDP, HMP, IAP, IEP, POP, RCP, SDP, STP, TCP, XTR
CAPS:	REG or SAL	**CAPS:**	XTR or PER
HRMIS:	SAL	**HRMIS:**	XTR

Standard Workforce is comprised of:

those employees who are:

currently working,
on paid leave,
unknown work status,

AND

those employees who are in:

regular positions
excess quota positions
backfill positions.

Work Status Code:

W
P
U

Position Type Code 2:

REGU
EXQU
LS18
UNKN

Note: *Summary tables should always be queried for the standard workforce.*

Human Resource Data DETAIL* Tables

Person
Person_Salaries
Work_Assignment_History

Human Resource Data SUMMARY* Tables

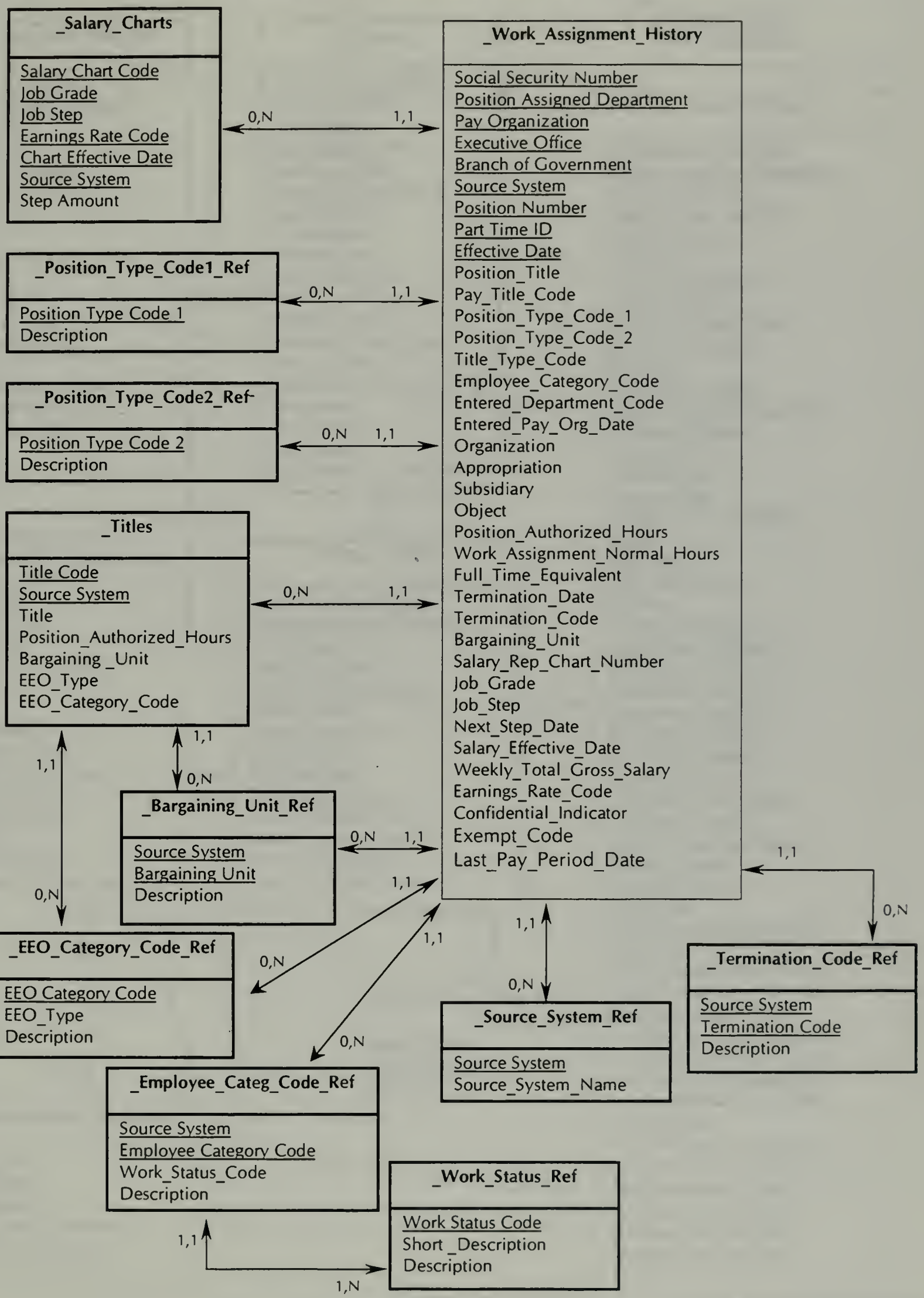
Employee_Approp_Stats
Employee_Barg_Unit_Stat
Employee_Org_Stats
Personnel_Summary
Workforce_Diversity

Human Resource Data REFERENCE Tables

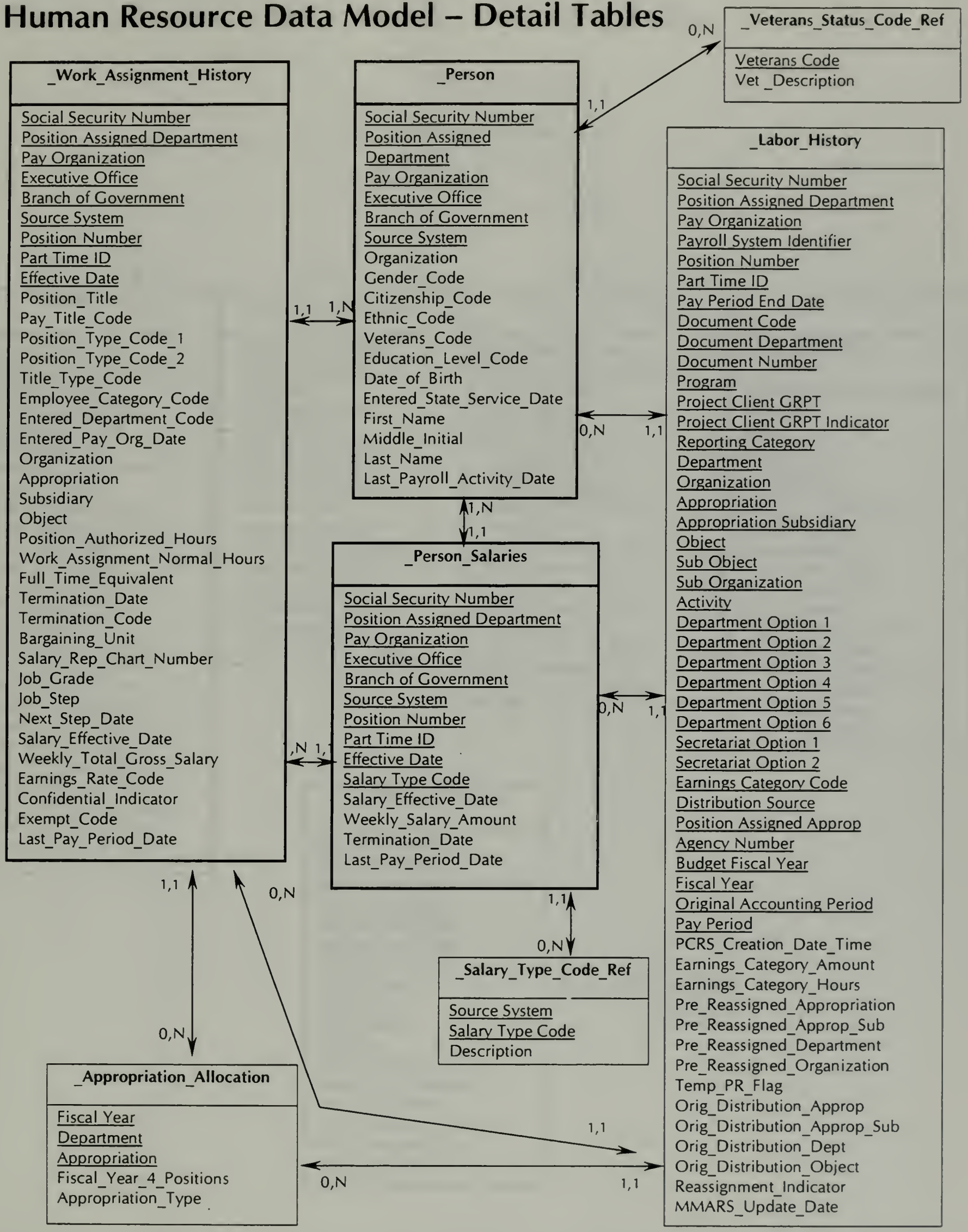
Bargaining_Unit_Ref
Earnings_Categ_Code_Ref
EEO_Category_Code_Ref
Employee_Categ_Code_Ref
Ethnic_Type_Ref
PARIS_Calendar_Ref
Position_Type_Code1_Ref
Position_Type_Code2_Ref
Salary_Charts
Salary_Type_Code_Ref
Source_System_Ref
Termination_Code_Ref
Titles
Veteran_Status_Code_Ref
Work_Status_Ref

* secured table views:
Department View (Non-prefixed)
Secretariat, Multi Department or Organization View (prefix = OS)
Statewide View (prefix = SW)

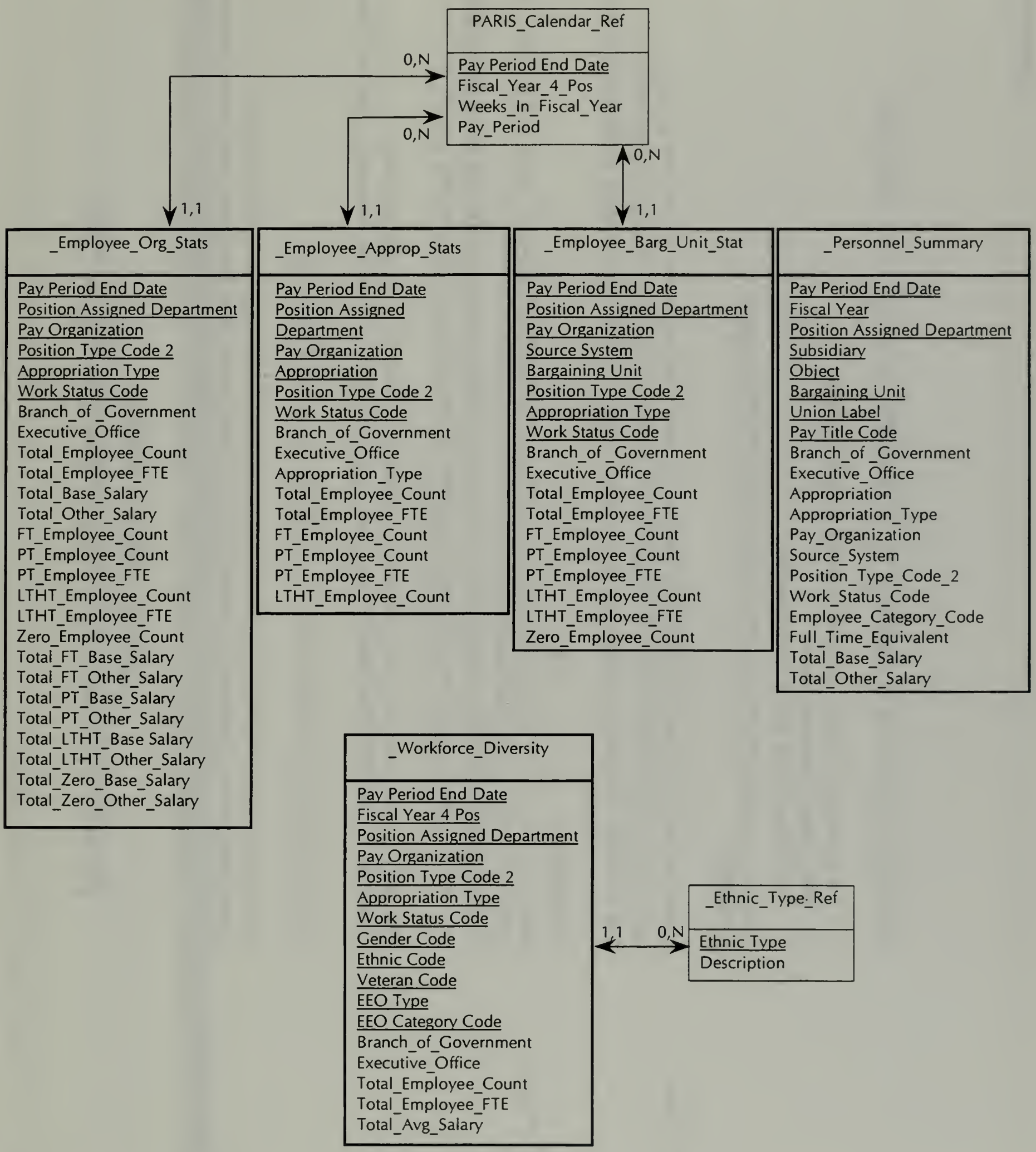
Human Resource Data Model – Reference Tables



Human Resource Data Model – Detail Tables



Human Resource Data Model -- Summary Tables



Information Warehouse Human Resource Data
Detail Table Listing

Table_Name	Definition
_Person	Describes the set of people (SSN, name, DOB,...) who have at least one Work Assignment reported to PARIS since 1990. Those who have been employees on one or more of the sources of PARIS. Not all employees are represented – "contractors" or "03's" for example. There are 10 attributes that describe a Person. Only the latest values are recorded: if an individual's name has changed or was corrected, only the latest is retained. There are over 250,000 rows. It is advised that in order not to receive duplicates for persons who have worked throughout the Commonwealth in various departments or on various payroll systems, **LINK ALL KEY FIELDS** (from SSN to Source) not just SSN when joining Work Assignment to Person.
_Person_Salaries	Provides detail (type and amount) on the components that make up Weekly_Total_Gross_Salary for each Work Assignment. For example, one Person might have only a "REG" salary in their current Work Assignment, but in a past one had a "REG" salary amount and a "SDP" amount for shift differential, or "XTR" for extra pay.
_Salary_Charts	Contains the detail on all salary charts used by all bargaining units ever tracked on PARIS. **Example:** Unit 06 on PMIS has had 13 charts in effect since the early 1990's. Each chart cover some 20-30 grades Each grade has seven steps Each step has a different salary amount for a pay period Thus each chart consists of 150-250 rows, and the total in the table is over 50,000 rows

Table_Name	Definition
_Titles	Provides •a 40 character description •the regular hours •EEO category for all job Title codes by •Bargaining Unit •Source. **CAPS** has no rows, hence no titles. **HRMIS** has approximately 1,000 titles, none with a BU. **PMIS** has about 10,000 from across about 20 BU. About 6,000 of those are tied to a BU, including M99 for management titles.
_Work_Assignment_History	Provides a detail history of all "work assignments" recorded in the PARIS system. The concept of work assignment is both unique and central to PARIS: it **DOES NOT** exist consistently on the three source systems. Each Work Assignment applies to: •one SSN only •paid through on source •to work in one "organization" only (BRANCH-EO-DEPT-ORG) •that started on one Effective_Date •was at one "total weekly salary" •in one Pay Title and Position Number (if those columns have meaning on the source). If the Work Assignment is "active", then the Last_Pay_Period_Date (which PARIS creates and does not come from the source) is NULL; it has no value, which is different than "blank". **Example:** Q: A list of all "active employees" in your department. A: Select Position_Assigned_Dept = "HRD" (for example) AND Last_Pay_Period is "Null"

Q: A list of employees who had active Work Assignments back on the first Saturday in FY95
A: Select Position_Assigned_Dept = "HRD" AND (Last_Pay_Period is NULL OR Last_Pay_Period>= 07/07/95) AND Effective_Date<=07/01/95

This combination says "get all Work Assignments that were effective before or on July 1,1995 and that ended on or after that date of have not ended (i.e. are still active)

Information Warehouse Human Resource Data
Reference Table Listing

Table_Name	Definition
_Bargaining_Unit_Ref	Provides a description for each of about 100 unit codes from the three payroll sources. Each job title in the _Titles table belongs to one and only one bargaining unit. **Example:** "P C22" stands for the PMIS paid "State Police Superior Officers".
_Earnings_Categ_Code_Ref	Provides descriptions for all earnings category codes within their hierarchical relationships.
_EEO_Category_Code_Ref	Provides a description of EEO(federal equal opportunity) codes that each source system uses to group job titles. There are 55 rows in total. **Example:** "4 08" is PMIS's EEO category 08, described as "service/maintenance" jobs.
_Employee_Categ_Code_Ref	Provides a description for employee status codes on each source to PARIS. It is used to group Work Assignments into common "work status" codes on PARIS. Example: • "H 06P" represents HRMIS employees on "Suspension – with pay" • "P L WP" describes PMIS employees on "Leave with pay – other" ⇒ both codes fold into the work status of "P" for "paid leave" on PARIS.
_Ethnic_Type_Ref	Provides descriptions for the 10 codes used by PARIS sources to assign an ethnic attribute to employees. **Example:** Both "A" and "3" denote an "African American" employee. • Numeric codes "2" through "8" are used by PMIS. • Alpha codes are used by CAPS and HRMIS.

Table_Name	Definition
_PARIS_Calendar_Ref	Provides the attributes for every pay period end date (Saturday's) needed for summarizing in mainframe PARIS. The table covers 20 years through 2007. Each row has 20 values such as how many pay periods are in that month or what period (from 01 to 53) is it within fiscal year etc.
_Position_Type_Code1_Ref	Provides a description of Position Type Code 1: •"P" for employees in PERMANENT positions •"T" for employees in TEMPORARY positions The Perm/Temp distinction has little meaning now on PMIS.
_Position_Type_Code2_Ref	Provides a description of Position Type Code 2 by which employees can be grouped: •"REGU" stands for Regular Positions •"EXQU" stands for Excess Quota •"LS18" stands for Backfill of sick leave •"UNKN" stands for Unknown •"PERD" stands for Per Diem •"BORD" stands for Board/ Commission •"SEAS" stands for Seasonal
_Salary_Type_Code_Ref	Provides a description for the 20 codes by which "salary" is broken down on PARIS. SALARY MEANS PRECISLY "WEEKLY TOTAL GROSS SALARY". SALARY IS NOT THE SAME AS EARNINGS. ⇒ SALARY is a projection about what the employer will pay a person for normal work. ⇒ EARNINGS is what an employee was paid in a set of pay periods.
_Source_System_Ref	Provides a description of each source system to PARIS. ⇒ H = HRMIS the UMASS system ⇒ C = CAPS ⇒ P = PMIS the Executive Branch Personnel/Payroll System

Table_Name	Definition
_Termination_Code_Ref	Provides a description of the 30 or so codes that define the "termination" of a PARIS Work Assignment. This is NOT necessarily the termination of employment at Dept-ORG. **Example:** ⇒ All 3 sources have a "PROM" code for a promotion that ends one Work Assignment. ⇒ An "X900" code for salary action, but CAPS does not have a "LAYO" code for layoff.
_Veterans_Status_Code_Ref	Provides a description of the eight one-character codes for a Person's Veteran status on PARIS. It is also a means of grouping employees in their Work Assignments Example: ⇒ Both blank and "N" stand for non-veteran. ⇒ "R" stands for "regular wartime vet". ⇒ "V" for Vietnam era vet as certified by SOAA.
_Work_Status_Ref	Provides a description of the six one-character work status codes used on PARIS to group employees by their Work Assignments. **Example:** ⇒ Standard Workforce has three codes • W = working • P = paid leave • U = unknown ⇒ I = industrial accident ⇒ N = inactive ⇒ L = leave w/o pay

Information Warehouse Human Resource Data
Summary Table Listing

Table_Name	Definition
_Employee_Approp_Stats	Contains employee and FTE counts sub totaled by: • **Appropriation** • Pay_Period • DEPT– ORG • Position_Type • Work_Status These are the raw values used in the "AA" function in mainframe PARIS. Querying this table can show how many FTE's there were by appropriation on selected dates for your department.
_Employee_Barg_Unit_Stat	Contains employee and FTE counts sub-totaled by: • **Bargaining Unit** • Pay_Period • DEPT-ORG • Position_Type • Work_Status These are the raw values used in the "SR" function in mainframe PARIS. Querying this table can show how many FTE's there were by BU on selected dates for your department. **NOTE:** This table contains sub-totals for the entire work force. You will need to exclude non-standard rows to produce totals that are similar in mainframe PARIS. Exclude: ⇒ POS-TYPE's SEAS. BORD and PERD and Work-status of "I" and "L"

Table_Name	Definition
_Employee_Org_Stats	Contains employee and FTE counts, and base and Other annual Salary by: • **Position_Type** • Pay_Period • DEPT-ORG • Work_Status These are the raw values used in the "OH" function in mainframe PARIS. Querying this table can show how many FTE's and annual salary (base, other or combined) by ORG on selected dates for your department. **NOTE:** This table contains sub-totals for the entire work force. You will need to exclude non-standard rows to produce totals that are similar in mainframe PARIS. Exclude: ⇒ POS-TYPE's SEAS, BORD and PERD and Work-status of "I" and "L"
_Personnel_Summary	Sums FTE, "base" and "other" by Pay_Period_End_Date, Fiscal Year, DEPT ... down to Pay_Title within Bargaining Unit. It allows for reporting on SALARY costs per account, or average salary per Title..., for a selected range of pay periods.

Table_Name	Definition
_Workforce_Diversity	Contains employee and FTE counts and AVERAGE annul Salary sub totaled by: • **Gender** • Pay_Period • DEPT-ORG • Appropriation • Position_Type • Work_Status • Ethnic Code • Veteran Code These are the raw values used in the "WD" function in mainframe PARIS. Querying this table can total the people, FTE's and annual salary (base, other or combined) gender or ethnic type within gender on selected dates for your department. **NOTE:** This table contains sub-totals for the entire work force. You will need to exclude non-standard rows to produce totals that are similar in mainframe PARIS. Exclude: ⇒ POS-TYPE's SEAS. BORD and PERD and Work-status of "I" and "L"

Quarter Ending v. Week Ending Dates

The Warehouse currently stores complete Human Resources Data back to 6/17/95. Prior to this date the Warehouse stores only quarter end date information. Like a snap shot in time this quarter end date information only shows what was relevant for that week.

For Example:

The storing of just the quarter end date information is similar to taking a photo every hour at a four-hour party. If a person arrived and left during the same hour, it is possible that none of the photos will contain that person. However, if a count of all the attendees was taken each hour, this aggregate data could still be useful.

Therefore if you need detailed HR information from the Warehouse, you can only go back as far as the week ending date of 6/17/95.

If you want to perform summary and trend analysis, you can go back to FY 91 and utilize the HR information stored by quarter-ending dates in the Warehouse.

FY 91 - 5 weeks of data stored
FY 92 - 5 weeks of data stored
FY 93 - 5 weeks of data stored
FY 94 - 5 weeks of data stored
FY 95 - 6 weeks of data stored
FY 96 - 52 weeks of data stored
FY 97 - 53 weeks of data stored
FY 98 - All weeks of data stored thus far

The following HR Data tables in the Information Warehouse that have the field Pay_Period_End_Date or Last_Pay_Period_Date.

Table_Name	Column_Name
_Employee	Pay_Period_End_Date
_Employee_Approp_Stats	Pay_Period_End_Date
_Employee_Barg_Unit_Stat	Pay_Period_End_Date
_Employee_Category_Stats	Pay_Period_End_Date
_Employee_Org_Stats	Pay_Period_End_Date
_Employee_Statistics	Pay_Period_End_Date
_Labor_History	Pay_Period_End_Date
_PARIS_Calendar_Ref	Pay_Period_End_Date
_Person	Last_Payroll_Activity_Date
_Person_Salaries	Last_Pay_Period_Date
_Personnel_Summary	Pay_Period_End_Date
_Salary_Summary	Pay_Period_End_Date
_Work_Assignment_History	Last_Pay_Period_Date
_Workforce_Diversity	Pay_Period_End_Date

Quarter End Dates and Pay Period End Dates by Fiscal Year

FY 1991	*FY 1992*	*FY 1993*	*FY 1994*	*FY 1995*	*FY 1996*	*FY 1996 (continued)*	*FY 1997*	*FY 1997 (continued)*
July 7, 1990	July 6, 1991	July 4, 1992	July 3, 1993	July 2, 1994	July 1, 1995	Jan 27, 1996	July 6, 1996	Feb 1, 1997
Sep 29, 1990	Sep 28, 1991	Sep 26, 1992	Sep 25, 1993	Sep 24, 1994	July 8, 1995	Feb 3, 1996	July 13, 1996	Feb 8, 1997
Dec 29, 1990	Dec 28, 1991	Dec 26, 1992	Dec 25, 1993	Dec 31, 1994	July 15, 1995	Feb 10, 1996	July 20, 1996	Feb 15, 1997
Mar 30, 1991	Mar 28, 1992	Mar 27, 1993	Mar 26, 1994	Mar 25, 1995	July 22, 1995	Feb 17, 1996	July 27, 1996	Feb 22, 1997
June 29, 1991	June 7, 1992	June 26, 1993	June 25, 1994	June 17, 1995	July 29, 1995	Feb 24, 1996	Aug 3, 1996	Mar 1, 1997
				June 24, 1995	Aug 5, 1995	Mar 2, 1996	Aug 10, 1996	Mar 8, 1997
					Aug 12, 1995	Mar 9, 1996	Aug 17, 1996	Mar 15, 1997
					Aug 19, 1995	Mar 16, 1996	Aug 24, 1996	Mar 22, 1997
					Aug 26, 1995	Mar 23, 1996	Aug 31, 1996	Mar 29, 1997
					Sep 2, 1995	Mar 30, 1996	Sep 7, 1996	Apr 5, 1997
					Sep 9, 1995	Apr 6, 1996	Sep 14, 1996	Apr 12, 1997
					Sep 16, 1995	Apr 13, 1996	Sep 21, 1996	Apr 19, 1997
					Sep 23, 1995	Apr 20, 1996	Sep 28, 1996	Apr 26, 1997
					Sep 30, 1995	Apr 27, 1996	Oct 5, 1996	May 3, 1997
					Oct 7, 1995	May 4, 1996	Oct 12, 1996	May 10, 1997
					Oct 14, 1995	May 11, 1996	Oct 19, 1996	May 17, 1997
					Oct 21, 1995	May 18, 1996	Oct 26, 1996	May 24, 1997
					Oct 28, 1995	May 25, 1996	Nov 2, 1996	May 31, 1997
					Nov 4,1995	June 1, 1996	Nov 9, 1996	Jun 7, 1997
					Nov 11, 1995	June 8, 1996	Nov 16, 1996	Jun 14, 1997
					Nov 18, 1995	Jun 15, 1996	Nov 23, 1996	Jun 21, 1997
					Nov 25, 1995	June 22, 1996	Nov 30, 1996	Jun 28, 1997
					Dec 2, 1995	June 29, 1996	Dec 7, 1996	
					Dec 9, 1995		Dec 14, 1996	
					Dec 16, 1995		Dec 21, 1996	
					Dec 23, 1995		Dec 28, 1996	
					Dec 30, 1995		Jan 4, 1997	
					Jan 6, 1996		Jan 11, 1997	
					Jan 13, 1996		Jan 18, 1997	
					Jan 20, 1996		Jan 25, 1997	

Date Criterion for Work Assignment History

① **Current**

Last_Pay_Period_End_Date IS NULL

② ***One Week: Pay Period End Date = 12/13/97***

X

Effective_Date < = 12/13/97 **AND** Last_Pay_Period_End_Date > = 12/13/97
OR
Last_Pay_Period_End_Date IS NULL

③ Effective_Date < = 12/31/96

Range: Calendar Year 1996

Last_Pay_Period_End_Date > = 1/1/96
OR
Last_Pay_Period_End_Date IS NULL

Query Building Worksheet

Step 1: Define Your Query

Step 2: Choose Your Table(s)

TABLES TO BE ATTACHED/ADDED

Step 3: Choose Your Fields

FIELDS TO BE DISPLAYED	TABLE NAME

Step 4: Create Your Joins

LEFT TABLE	ELEMENT TO BE JOINED	TYPE OF JOIN	RIGHT TABLE

Step 5: Refine Your Query

FIELD NAME	TABLE NAME	CRITERIA (i.e., BFY = 96)	FUNCTION (i.e. sum, average)	SORT (i.e., ascending/descending)

Query 1

Step 1: Define Your Query
How many employees and FTE's does my department employ?

Step 2: Choose Your Table(s)

TABLES TO BE ATTACHED/ADDED
_Employee_Org_Stats

Step 3: Choose Your Fields

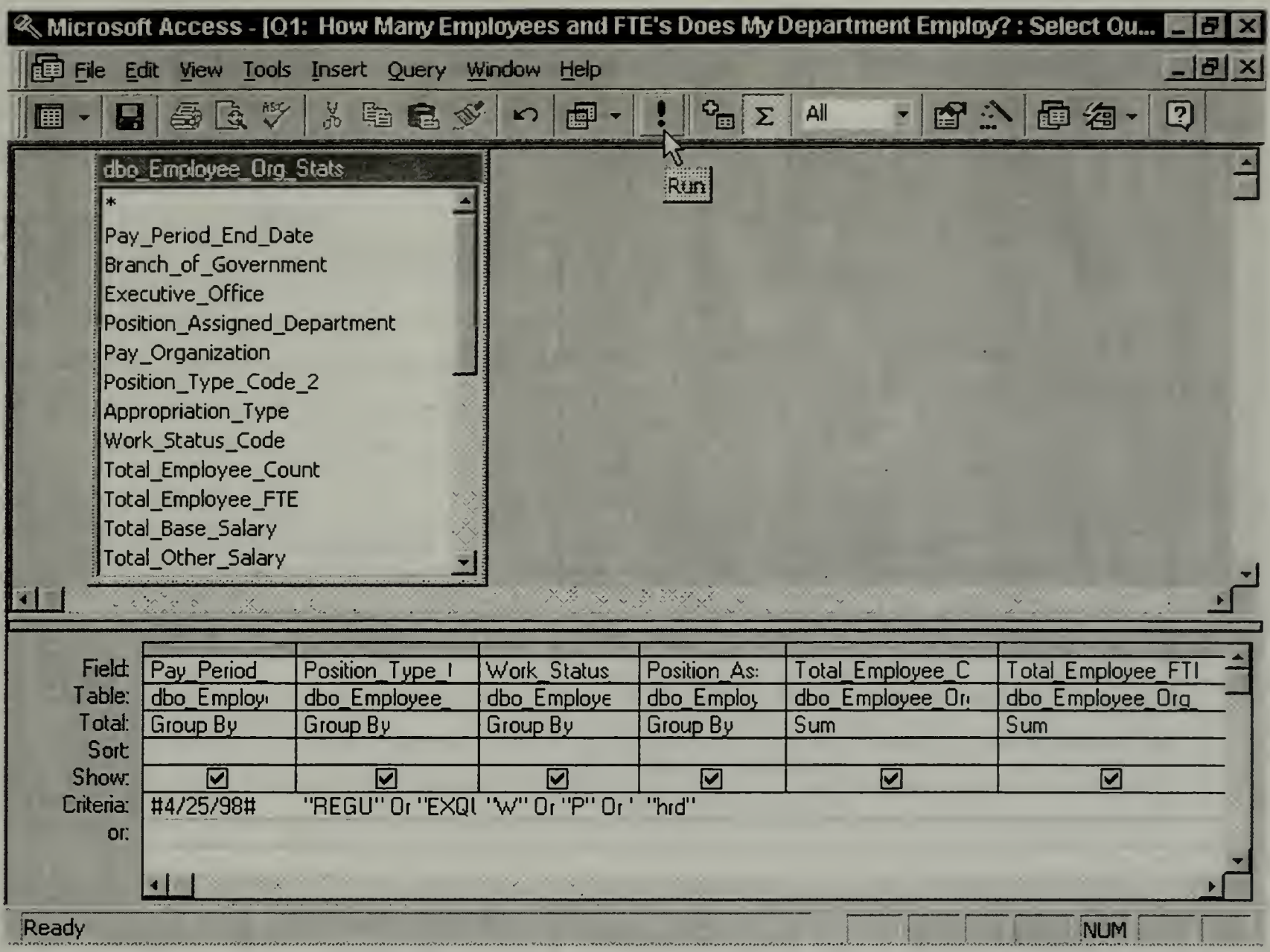
FIELDS TO BE DISPLAYED	TABLE NAME
Pay_Period_End_Date	_Employee_Org_Stats
Position_Type_Code_2	_Employee_Org_Stats
Work_Status_Code	_Employee_Org_Stats
Position_Assigned_Department	_Employee_Org_Stats
Total_Employee_Count	_Employee_Org_Stats
Total_Employee_FTE	_Employee_Org_Stats

Step 4: Create Your Joins

LEFT TABLE	ELEMENT TO BE JOINED	TYPE OF JOIN	RIGHT TABLE
No joins			

Step 5: Refine Your Query

FIELD NAME	TABLE NAME	CRITERIA	FUNCTION	SORT
Pay_Period_End_Date	_Employee_Org_Stats	April 25, 1998		
Position_Type_Code_2	_Employee_Org_Stats	Regu or Exqu or Ls18 or Unkn		
Work_Status_Code	_Employee_Org_Stats	W or P or U		
Position_Assigned_Department	_Employee_Org_Stats	HRD		
Total_Employee_Count	_Employee_Org_Stats		Sum	
Total_Employee_FTE	_Employee_Org_Stats		Sum	


Microsoft Access - [Q1: How Many Employees and FTE's Does My Department Employ? : Select Qu...
File Edit View Tools Insert Query Window Help
All
Run
dbo_Employee_Org_Stats
*
Pay_Period_End_Date
Branch_of_Government
Executive_Office
Position_Assigned_Department
Pay_Organization
Position_Type_Code_2
Appropriation_Type
Work_Status_Code
Total_Employee_Count
Total_Employee_FTE
Total_Base_Salary
Total_Other_Salary
Field: Pay_Period Position_Type_I Work_Status Position_As: Total_Employee_C Total_Employee_FTI
Table: dbo_Employ dbo_Employee_ dbo_Employe dbo_Employ dbo_Employee_Or dbo_Employee_Org_
Total: Group By Group By Group By Group By Sum Sum
Sort:
Show:
Criteria: #4/25/98# "REGU" Or "EXQU "W" Or "P" Or " "hrd"
or:
Ready
NUM

Query 1a

Step 1: Define Your Query
How many employees and FTE's does my department employ by appropriation?

Step 2: Choose Your Table(s)

TABLES TO BE ATTACHED/ADDED
_Personnel_Summary

Step 3: Choose Your Fields

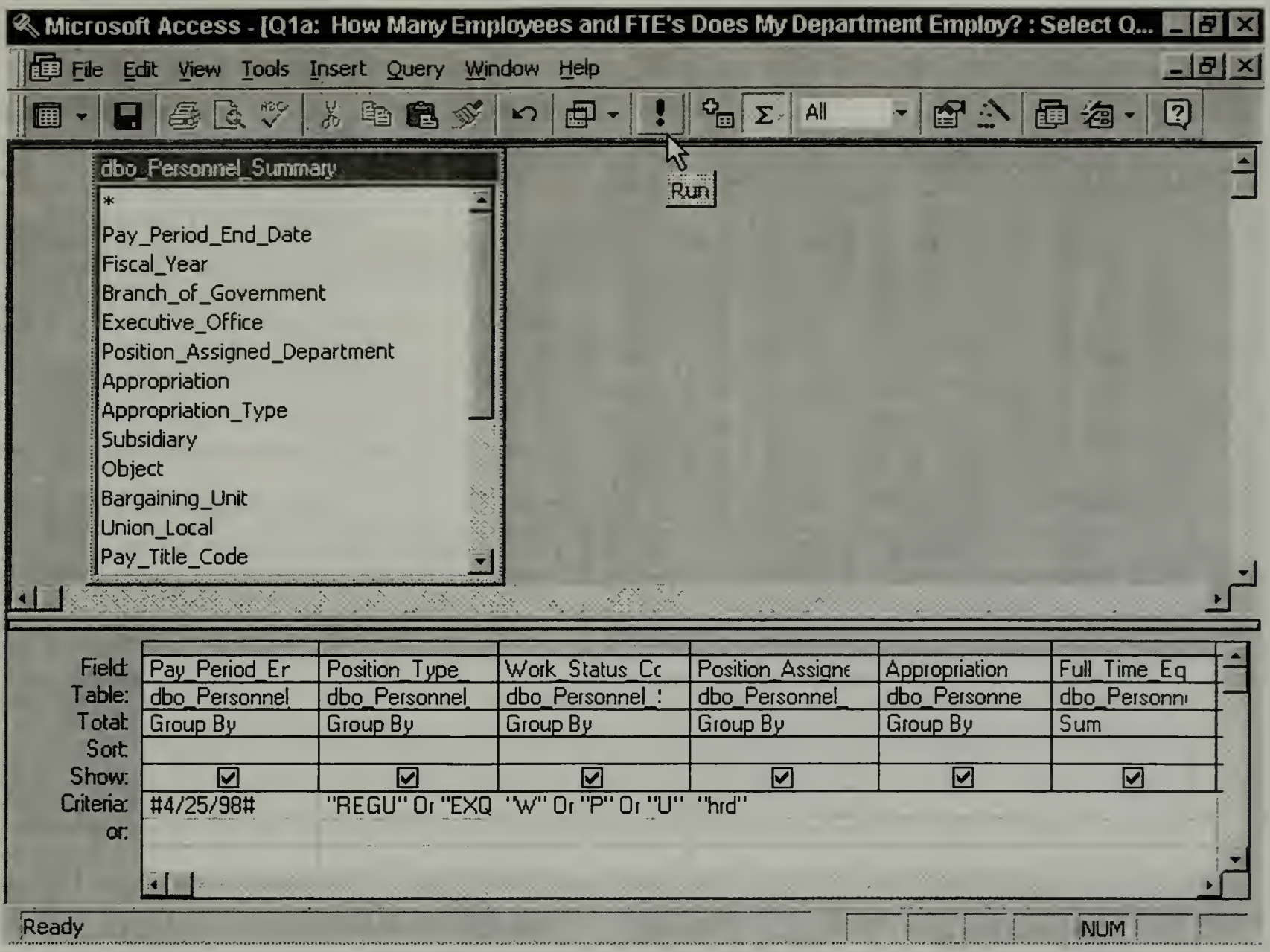
FIELDS TO BE DISPLAYED	TABLE NAME
Pay_Period_End_Date	_Personnel_Summary
Position_Type_Code_2	_Personnel_Summary
Work_Status_Code	_Personnel_Summary
Position_Assigned_Department	_Personnel_Summary
Appropriation	_Personnel_Summary
Full_Time_Equivalent	_Personnel_Summary

Step 4: Create Your Joins

LEFT TABLE	ELEMENT TO BE JOINED	TYPE OF JOIN	RIGHT TABLE
No joins			

Step 5: Refine Your Query

FIELD NAME	TABLE NAME	CRITERIA	FUNCTION	SORT
Pay_Period_End_Date	_Personnel_Summary	April 25, 1998		
Position_Type_Code_2	_Personnel_Summary	Regu or Exqu or Ls18 or Unkn		
Work_Status_Code	_Personnel_Summary	W or P or U		
Position_Assigned_Department	_Personnel_Summary	HRD		
Appropriation	_Personnel_Summary			
Full_Time_Equivalent	_Personnel_Summary		Sum	


Microsoft Access - [Q1a: How Many Employees and FTE's Does My Department Employ? : Select Q...
File Edit View Tools Insert Query Window Help
All
Run
dbo_Personnel_Summary
*
Pay_Period_End_Date
Fiscal_Year
Branch_of_Government
Executive_Office
Position_Assigned_Department
Appropriation
Appropriation_Type
Subsidiary
Object
Bargaining_Unit
Union_Local
Pay_Title_Code
Field: Pay_Period_Er | Position_Type_ | Work_Status_Cc | Position_Assigne | Appropriation | Full_Time_Eq
Table: dbo_Personnel | dbo_Personnel | dbo_Personnel_! | dbo_Personnel_ | dbo_Personne | dbo_Personn
Total: Group By | Group By | Group By | Group By | Group By | Sum
Sort:
Show:
Criteria: #4/25/98# | "REGU" Or "EXQ | "W" Or "P" Or "U" | "hrd"
or:
Ready
NUM

Query 1b

Step 1: Define Your Query
How many employees and FTE's does my department employ by bargaining unit?

Step 2: Choose Your Table(s)

TABLES TO BE ATTACHED/ADDED
_Personnel_Summary

Step 3: Choose Your Fields

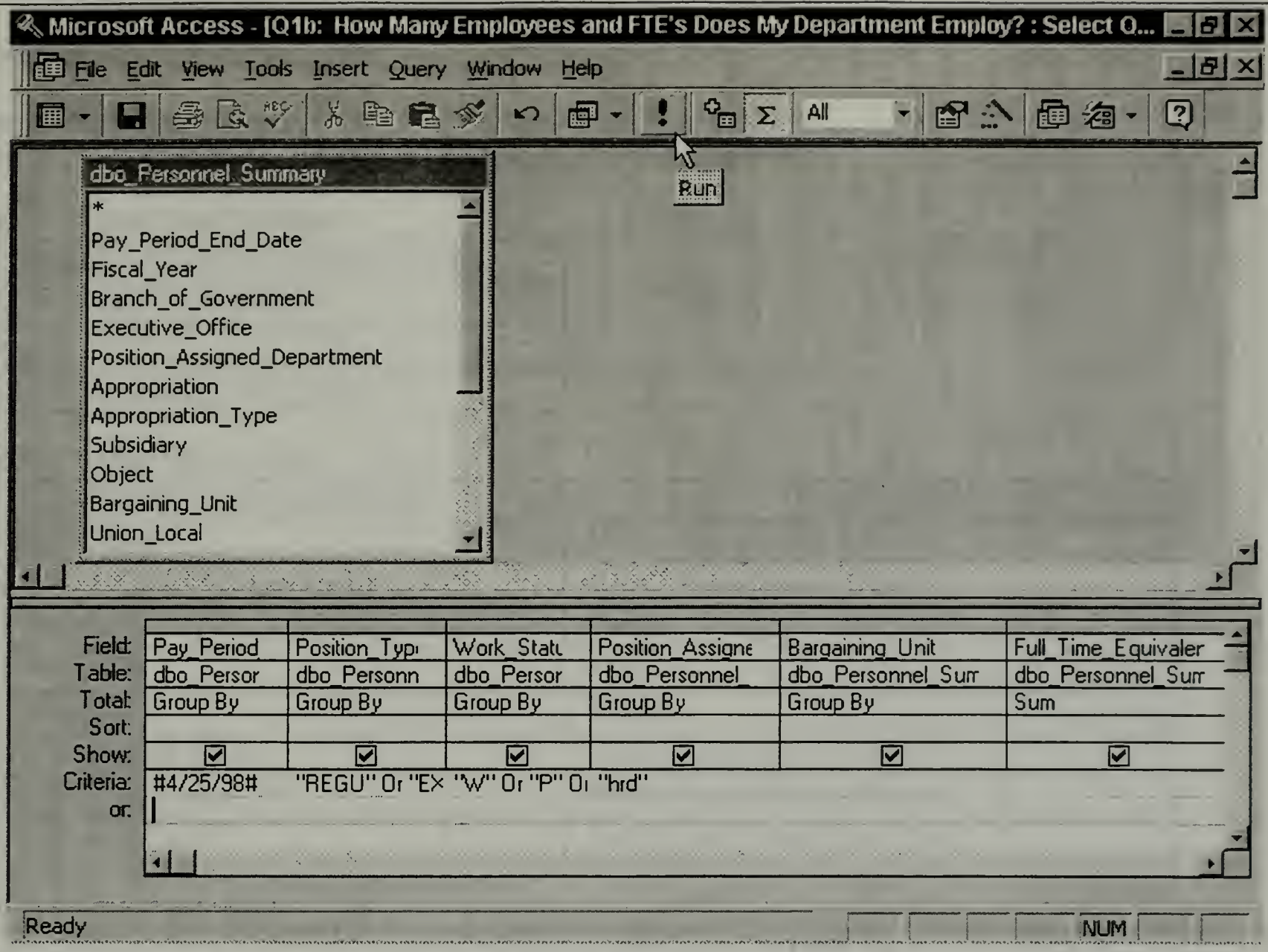
FIELDS TO BE DISPLAYED	TABLE NAME
Pay_Period_End_Date	_Personnel_Summary
Position_Type_Code_2	_Personnel_Summary
Work_Status_Code	_Personnel_Summary
Position_Assigned_Department	_Personnel_Summary
Bargaining_Unit	_Personnel_Summary
Full_Time_Equivalent	_Personnel_Summary

Step 4: Create Your Joins

LEFT TABLE	ELEMENT TO BE JOINED	TYPE OF JOIN	RIGHT TABLE
No joins			

Step 5: Refine Your Query

FIELD NAME	TABLE NAME	CRITERIA	FUNCTION	SORT
Pay_Period_End_Date	_Personnel_Summary	April 25, 1998		
Position_Type_Code_2	_Personnel_Summary	Regu or Exqu or Ls18 or Unkn		
Work_Status_Code	_Personnel_Summary	W or P or U		
Position_Assigned_Department	_Personnel_Summary	HRD		
Bargaining_Unit	_Personnel_Summary			
Full_Time_Equivalent	_Personnel_Summary		Sum	


Microsoft Access - [Q1b: How Many Employees and FTE's Does My Department Employ? : Select Q...
File Edit View Tools Insert Query Window Help
All
Run
dbo_Personnel_Summary
*
Pay_Period_End_Date
Fiscal_Year
Branch_of_Government
Executive_Office
Position_Assigned_Department
Appropriation
Appropriation_Type
Subsidiary
Object
Bargaining_Unit
Union_Local
Field: Pay_Period | Position_Typ | Work_Stat | Position_Assigne | Bargaining_Unit | Full_Time_Equivaler
Table: dbo_Persor | dbo_Personn | dbo_Persor | dbo_Personnel_ | dbo_Personnel_Sum | dbo_Personnel_Sum
Total: Group By | Group By | Group By | Group By | Group By | Sum
Sort:
Show:
Criteria: #4/25/98# "REGU" Or "EX "W" Or "P" Or "hrd"
or:
Ready
NUM

Query 2

Step 1: Define Your Query
Who are the individuals currently employed by my department?

Step 2: Choose Your Table(s)

TABLES TO BE ATTACHED/ADDED
_Work_Assignment_History
_Person
_Employee_Categ_Code_Ref

Step 3: Choose Your Fields

FIELDS TO BE DISPLAYED	TABLE NAME
Source_System	_Work_Assignment_History
Position_Assigned_Department	_Work_Assignment_History
First_Name	_Person
Middle_Initial	_Person
Last_Name	_Person
Last_Pay_Period_Date	_Work_Assignment_History
Position_Type_Code_2	_Work_Assignment_History
Work_Status_Code	_Employee_Categ_Code_Ref

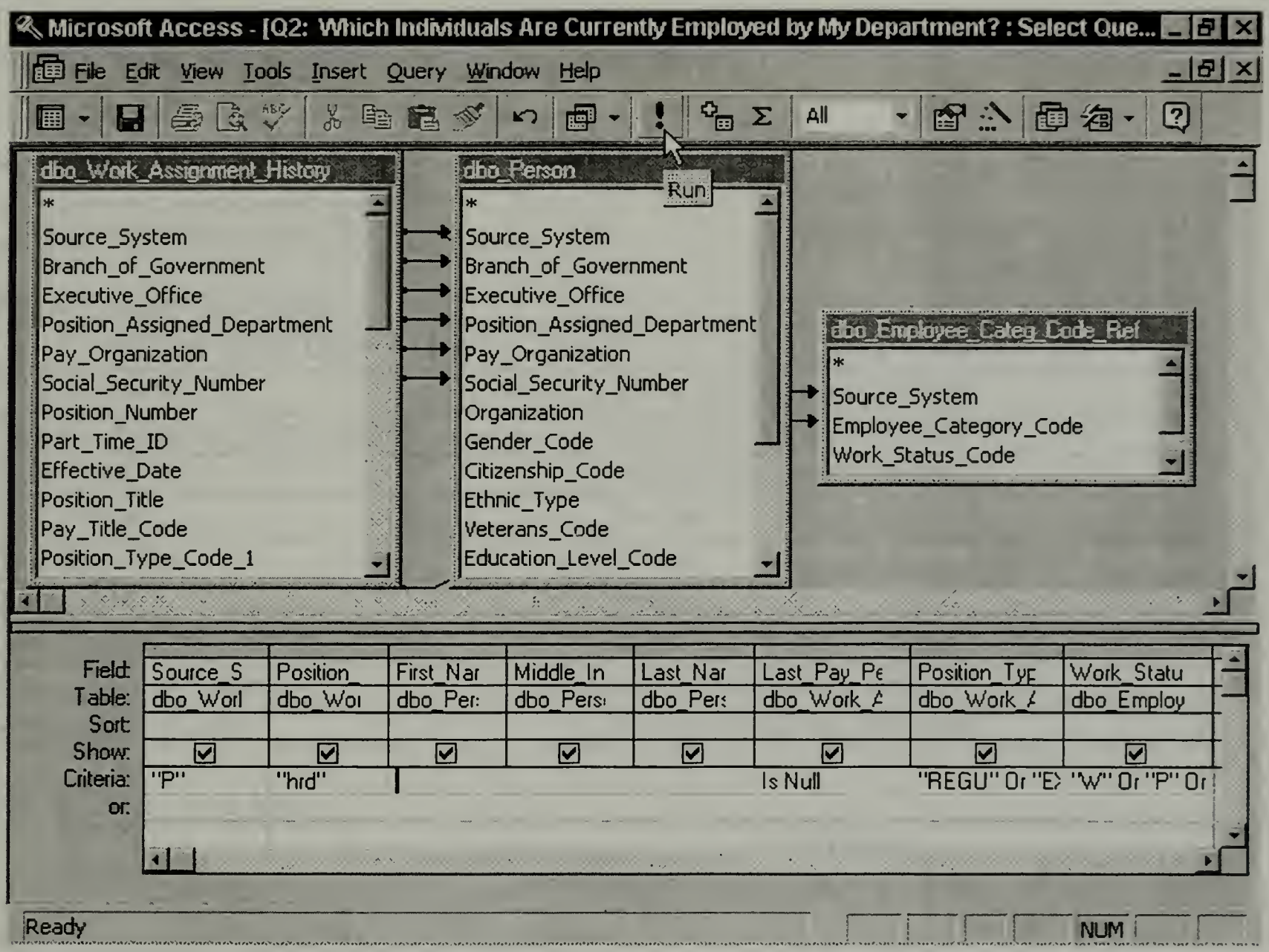
Step 4: Create Your Joins

LEFT TABLE	ELEMENT TO BE JOINED	TYPE OF JOIN	RIGHT TABLE
_Work_Assignment_History	Source_System	Outer join	_Person _Employee_Categ_Code_Ref
_Work_Assignment_History	Branch_of_Government	Outer join	_Person
_Work_Assignment_History	Executive_Office	Outer join	_Person
_Work_Assignment_History	Position_Assigned_Department	Outer join	_Person
_Work_Assignment_History	Pay_Organization	Outer join	_Person
_Work_Assignment_History	Social_Security_Number	Outer join	_Person
_Work_Assignment_History	Employee_Category_Code	Outer join	_Employee_Categ_Code_Ref

Step 5: Refine Your Query

FIELD NAME	TABLE NAME	CRITERIA	FUNCTION	SORT
Source_System	_Work_Assignment_History	P		
Position_Assigned_Department	_Work_Assignment_History	HRD		
First_Name	_Person			
Middle_Initial	_Person			
Last_Name	_Person			
Last_Pay_Period_Date	_Work_Assignment_History	Is null		
Position_Type_Code_2	_Work_Assignment_History	Regu or Exqu		

		or Ls18 or Unkn		
Work_Status_Code	_Employee_Categ_Code_Ref	W or P or U		



Query 2a

Step 1: Define Your Query
Who are the individuals currently employed by my department by a specific bargaining unit?

Step 2: Choose Your Table(s)

TABLES TO BE ATTACHED/ADDED
_Work_Assignment_History
_Person
_Employee_Categ_Code_Ref

Step 3: Choose Your Fields

FIELDS TO BE DISPLAYED	TABLE NAME
Source_System	_Work_Assignment_History
Position_Assigned_Department	_Work_Assignment_History
Bargaining_Unit	_Work_Assignment_History
First_Name	_Person
Middle_Initial	_Person
Last_Name	_Person
Last_Pay_Period_Date	_Work_Assignment_History
Position_Type_Code_2	_Work_Assignment_History
Work_Status_Code	_Employee_Categ_Code_Ref

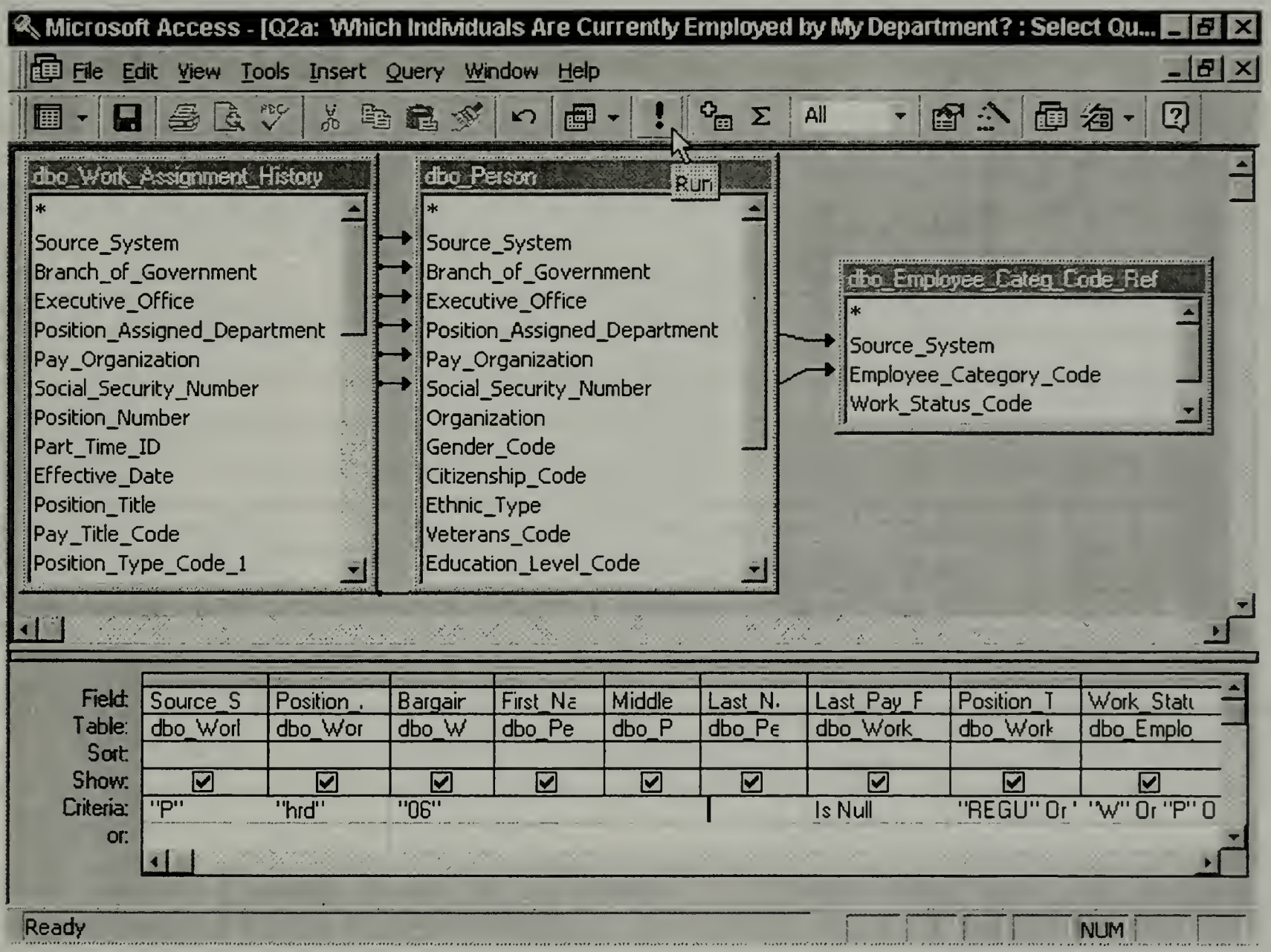
Step 4: Create Your Joins

LEFT TABLE	ELEMENT TO BE JOINED	TYPE OF JOIN	RIGHT TABLE
_Work_Assignment_History	Source_System	Outer join	_Person _Employee_Categ_Code_Ref
_Work_Assignment_History	Branch_of_Government	Outer join	_Person
_Work_Assignment_History	Executive_Office	Outer join	_Person
_Work_Assignment_History	Position_Assigned_Department	Outer join	_Person
_Work_Assignment_History	Pay_Organization	Outer join	_Person
_Work_Assignment_History	Social_Security_Number	Outer join	_Person
_Work_Assignment_History	Employee_Category_Code	Outer join	_Employee_Categ_Code_Ref
_Work_Assignment_History	Position_Title	Outer join	_Title

Step 5: Refine Your Query

FIELD NAME	TABLE NAME	CRITERIA	FUNCTION	SORT
Source_System	_Work_Assignment_History	P		
Position_Assigned_Department	_Work_Assignment_History	HRD		
Bargaining_Unit	_Work_Assignment_History	06		
First_Name	_Person			

Middle_Initial	_Person			
Last_Name	_Person			
Last_Pay_Period_Date	_Work_Assignment_History	Is null		
Position_Type_Code_2	_Work_Assignment_History	Regu or Exqu or Ls18 or Unkn		
Work_Status_Code	_Employee_Categ_Code_Ref	W or P or U		



Query 2b

Step 1: Define Your Query
Who are the individuals currently employed by my department by position title?

Step 2: Choose Your Table(s)

TABLES TO BE ATTACHED/ADDED
_Work_Assignment_History
_Person
_Employee_Categ_Code_Ref
_Titles

Step 3: Choose Your Fields

FIELDS TO BE DISPLAYED	TABLE NAME
Source_System	_Work_Assignment_History
Position_Assigned_Department	_Work_Assignment_History
Title	_Title
First_Name	_Person
Middle_Initial	_Person
Last_Name	_Person
Last_Pay_Period_Date	_Work_Assignment_History
Position_Type_Code_2	_Work_Assignment_History
Work_Status_Code	_Employee_Categ_Code_Ref

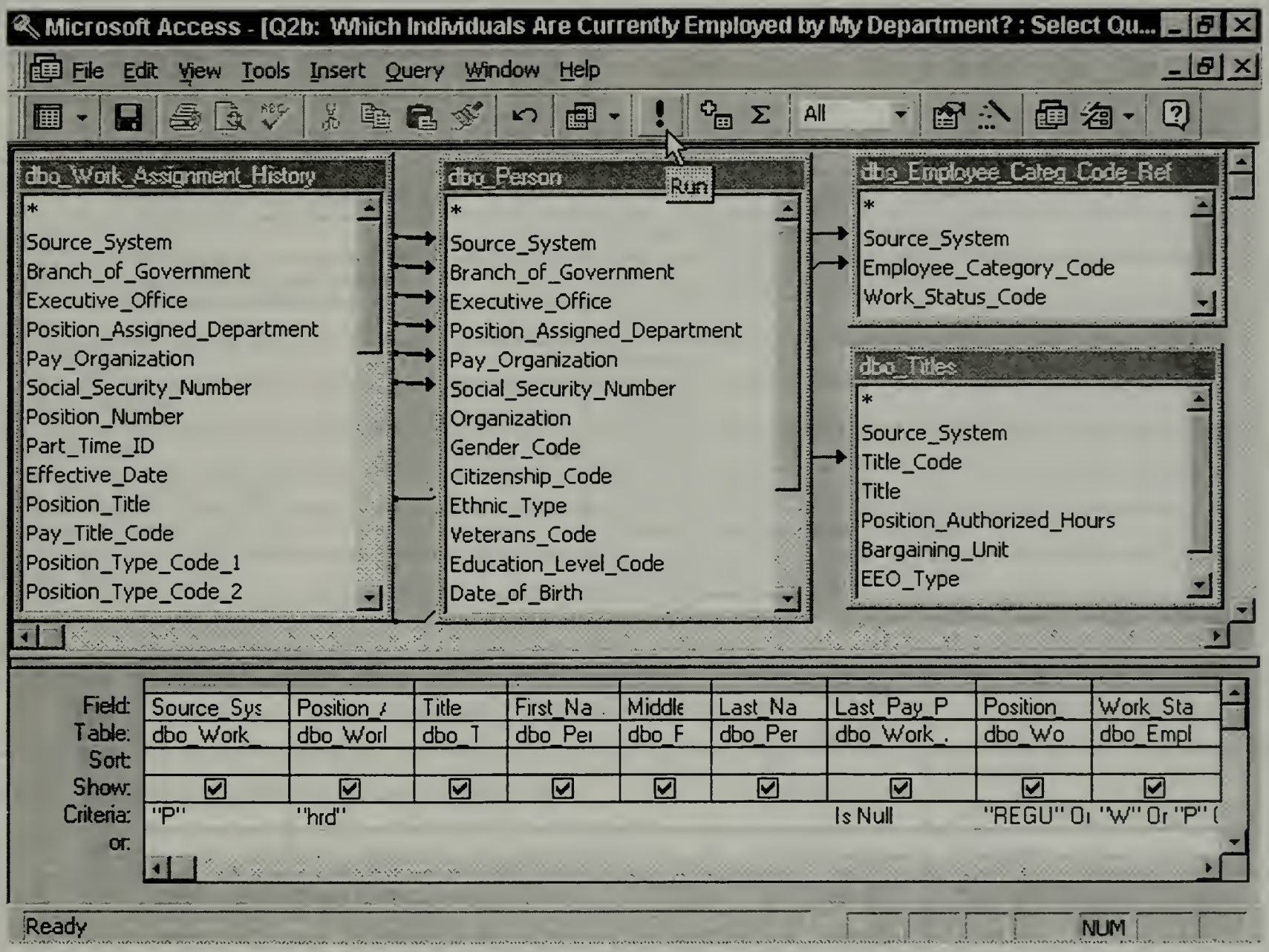
Step 4: Create Your Joins

LEFT TABLE	ELEMENT TO BE JOINED	TYPE OF JOIN	RIGHT TABLE
_Work_Assignment_History	Source_System	Outer join	_Person _Employee_Categ_Code_Ref
_Work_Assignment_History	Branch_of_Government	Outer join	_Person
_Work_Assignment_History	Executive_Office	Outer join	_Person
_Work_Assignment_History	Position_Assigned_Department	Outer join	_Person
_Work_Assignment_History	Pay_Organization	Outer join	_Person
_Work_Assignment_History	Social_Security_Number	Outer join	_Person
_Work_Assignment_History	Employee_Category_Code	Outer join	_Employee_Categ_Code_Ref
_Work_Assignment_History	Position_Title	Outer join	_Title

Step 5: Refine Your Query

FIELD NAME	TABLE NAME	CRITERIA	FUNCTION	SORT
Source_System	_Work_Assignment_History	P		
Position_Assigned_Department	_Work_Assignment_History	HRD		
Title				

First_Name	_Person			
Middle_Initial	_Person			
Last_Name	_Person			
Last_Pay_Period_Date	_Work_Assignment_History	Is null		
Position_Type_Code_2	_Work_Assignment_History	Regu or Exqu or Ls18 or Unkn		
Work_Status_Code	_Employee_Categ_Code_Ref	W or P or U		



Query 2c

Step 1: Define Your Query
Who are the individuals currently employed by my department by pay title?

Step 2: Choose Your Table(s)

TABLES TO BE ATTACHED/ADDED
_Work_Assignment_History
_Person
_Employee_Categ_Code_Ref
_Titles

Step 3: Choose Your Fields

FIELDS TO BE DISPLAYED	TABLE NAME
Source_System	_Work_Assignment_History
Position_Assigned_Department	_Work_Assignment_History
Title	_Title
First_Name	_Person
Middle_Initial	_Person
Last_Name	_Person
Last_Pay_Period_Date	_Work_Assignment_History
Position_Type_Code_2	_Work_Assignment_History
Work_Status_Code	_Employee_Categ_Code_Ref

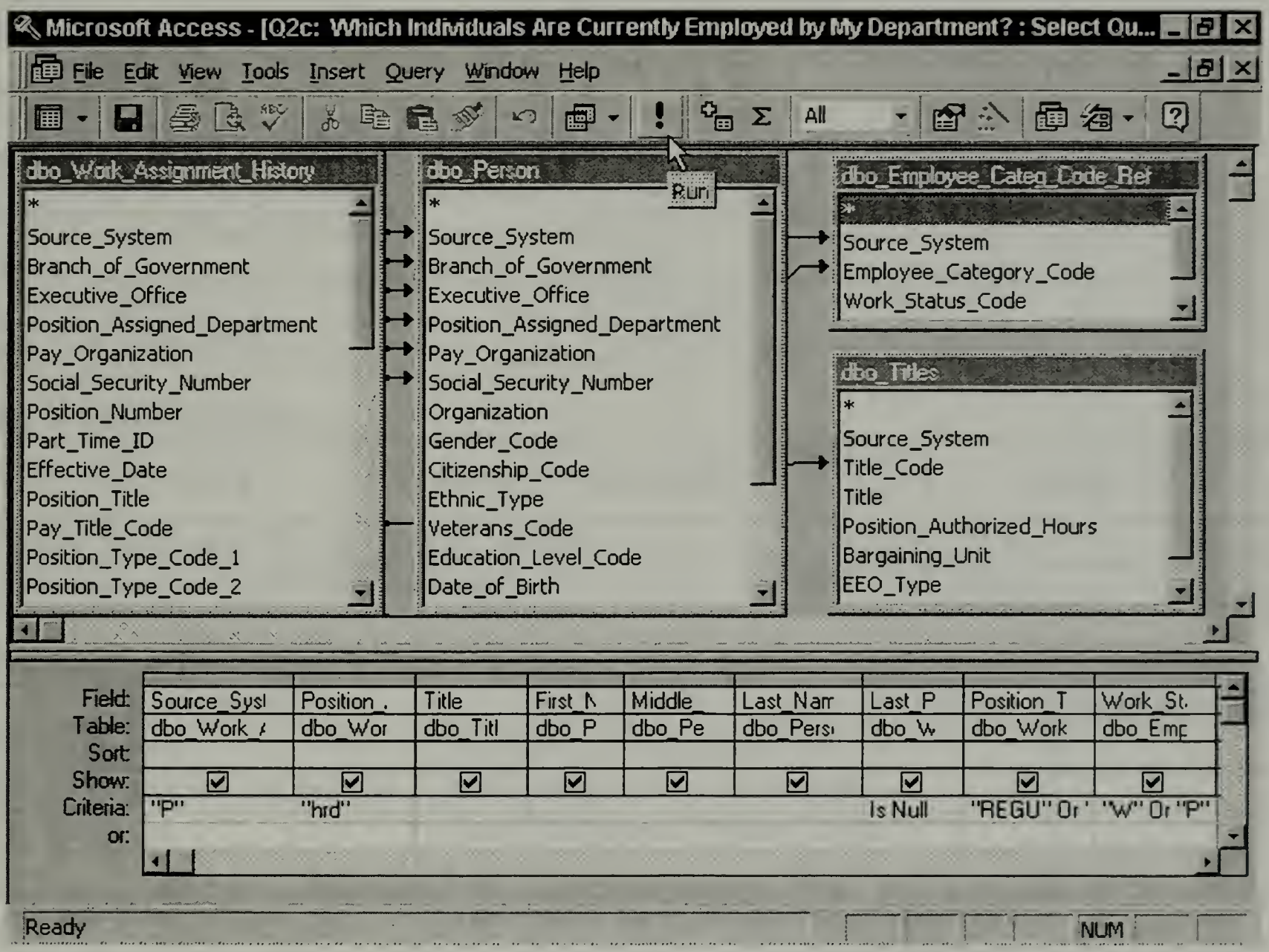
Step 4: Create Your Joins

LEFT TABLE	ELEMENT TO BE JOINED	TYPE OF JOIN	RIGHT TABLE
_Work_Assignment_History	Source_System	Outer join	_Person _Employee_Categ_Code_Ref
_Work_Assignment_History	Branch_of_Government	Outer join	_Person
_Work_Assignment_History	Executive_Office	Outer join	_Person
_Work_Assignment_History	Position_Assigned_Department	Outer join	_Person
_Work_Assignment_History	Pay_Organization	Outer join	_Person
_Work_Assignment_History	Social_Security_Number	Outer join	_Person
_Work_Assignment_History	Employee_Category_Code	Outer join	_Employee_Categ_Code_Ref
_Work_Assignment_History	Position_Title	Outer join	_Title

Step 5: Refine Your Query

FIELD NAME	TABLE NAME	CRITERIA	FUNCTION	SORT
Source_System	_Work_Assignment_History	P		
Position_Assigned_Department	_Work_Assignment_History	HRD		
Title	_Title			

First_Name	_Person			
Middle_Initial	_Person			
Last_Name	_Person			
Last_Pay_Period_Date	_Work_Assignment_History	Is null		
Position_Type_Code_2	_Work_Assignment_History	Regu or Exqu or Ls18 or Unkn		
Work_Status_Code	_Employee_Categ_Code_Ref	W or P or U		



Query 3

Step 1: Define Your Query
How many Systems Analysts were employed in my department on December 10, 1997?

Step 2: Choose Your Table(s)

TABLES TO BE ATTACHED/ADDED
_Work_Assignment_History
_Titles

Step 3: Choose Your Fields

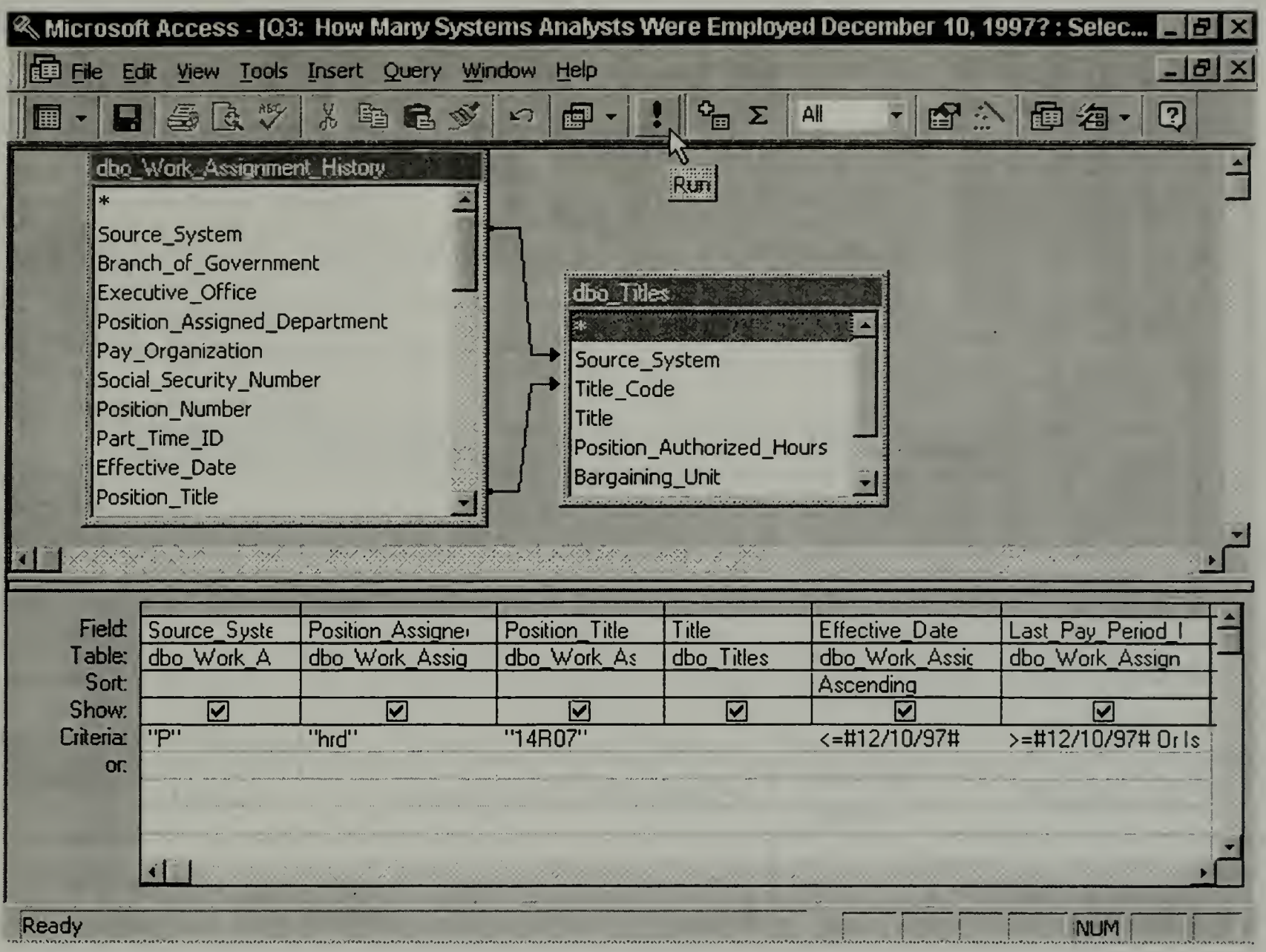
FIELDS TO BE DISPLAYED	TABLE NAME
Source_System	_Work_Assignment_History
Position_Assigned_Department	_Work_Assignment_History
Title	_Title
Effective_Date	_Work_Assignment_History
Last_Pay_Period_Date	_Work_Assignment_History

Step 4: Create Your Joins

LEFT TABLE	ELEMENT TO BE JOINED	TYPE OF JOIN	RIGHT TABLE
_Work_Assignment_History	Source_System	Outer join	_Title
_Work_Assignment_History	Position_Title	Outer join	_Title

Step 5: Refine Your Query

FIELD NAME	TABLE NAME	CRITERIA	FUNCTION	SORT
Source_System	_Work_Assignment_History	P		
Position_Assigned_Department	_Work_Assignment_History	HRD		
Position_Title	_Work_Assignment_History	14R07		
Title	_Title			
Effective_Date	_Work_Assignment_History	< = 12/10/1997		
Last_Pay_Period_Date	_Work_Assignment_History	< = 12/10/1997 Is null		


Microsoft Access - [Q3: How Many Systems Analysts Were Employed December 10, 1997? : Selec...
File Edit View Tools Insert Query Window Help
All
Run
dbo_Work_Assignment_History
*
Source_System
Branch_of_Government
Executive_Office
Position_Assigned_Department
Pay_Organization
Social_Security_Number
Position_Number
Part_Time_ID
Effective_Date
Position_Title
dbo_Titles
*
Source_System
Title_Code
Title
Position_Authorized_Hours
Bargaining_Unit
Field: Source_Syste | Position_Assigne | Position_Title | Title | Effective_Date | Last_Pay_Period_I
Table: dbo_Work_A | dbo_Work_Assig | dbo_Work_As | dbo_Titles | dbo_Work_Assic | dbo_Work_Assign
Sort: | | | | Ascending |
Show: ☑ ☑ ☑ ☑ ☑ ☑
Criteria: "P" | "hrd" | "14R07" | | <=#12/10/97# | >=#12/10/97# Or Is
or:
Ready
NUM

Query 4

Step 1: Define Your Query
What are the actual payroll costs for my Department?

Step 2: Choose Your Table(s)

TABLES TO BE ATTACHED/ADDED
_Labor_History
_Employee_Name

Step 3: Choose Your Fields

FIELDS TO BE DISPLAYED	TABLE NAME

Step 4: Create Your Joins

LEFT TABLE	ELEMENT TO BE JOINED	TYPE OF JOIN	RIGHT TABLE

Step 5: Refine Your Query

FIELD NAME	TABLE NAME	CRITERIA	FUNCTION	SORT

How to Obtain Warehouse Security for Human Resource Data

The Commonwealth of Massachusetts
Executive Office for Administration and Finance
Information Technology Division

200 Arlington Street • Chelsea • Massachusetts • 02150

ARGEO PAUL CELLUCCI
GOVERNOR
CHARLES D. BAKER
SECRETARY
T. LOUIS GUTIERREZ
CHIEF INFORMATION OFFICER

Telephone: (617)660-4400
Facsimile: (617)660-4405

TO: WAREHOUSE Security Liaisons

FROM: Dick Bianco

DATE: March 12, 1998

RE: New Warehouse Form and Personal Liability Statement

Attached is the most current version of the Warehouse request form. Also attached are instructions to be used when completing the form. Upon completion of the form, please forward to

Security.ITD@ITD.state.ma.us

for processing. If you have questions regarding the Warehouse please call the Commonhelp line 1(800) 335-4702.

Please note that the Warehouse form no longer has the user's professional liability statement. Attached is a statement that you as Warehouse security liaisons should have the user sign. These signed forms should be retained by you and your agency. When the Warehouse functions are audited, these forms may be examined by the auditors. You, the Warehouse security liaison for your agency, are responsible for obtaining the signatures of the users and retaining these forms for the length of time the user has Warehouse access plus two years.

Attachments: Warehouse Access Request Form
Instructions for Warehouse Access Request Form
User's Professional Liability Statement

Instructions for Warehouse Access Request Form

TYPE OF REQUEST:
Please enter the type of request. If the user and UAID assigned to the user has not been allocated access to the Warehouse previously, the type of request is NEW. If a change in access is being requested all access wanted for the user must be entered on the form. **When requesting changes to an established profile, please be sure to fill out the form with the complete profile, as well as any requested additions or deletions.**

DATE:
Enter the date the request is being sent to the Information Security Unit for processing.

UAID:
Enter the Universal Access Identification Code allocated to the user. If an UAID has not been allocated to the user, the security liaison for the agency must complete and forward the form "REQUEST FOR SYSTEM ACCESS" to ISU for processing. Once the UAID is obtained, the Warehouse Access Request Form may be processed.

MMARS DATA:
Please check only one box for MMARS access. If MMARS Departmental Access is checked, the user will have access to view MMARS data for the department represented by the first three characters of his UAID.

If MMARS Organizational is checked, please enter the three character department codes which are requested. These three character codes must be alphabetic. Secretariat code(s) may also be listed. If the secretariat code is listed then the user will have access to the entire secretariat. The secretariat code must be a three character alphabetic code. If the user is to have to access to several departments within a secretariat but not the entire secretariat, do NOT list the secretariat code...simply list the departments to which the user is to have access.

If MMARS Other is checked, detail the access required in the space beside the word "Other".

PCRS DATA:
Please check only one box for PCRS access. If PCRS Departmental Access is checked, the user will have access to view PCRS data for the department represented by the first three characters of his UAID.

If PCRS Organizational is checked, please enter the four character numeric organizational code(s) to which the user is to have access OR enter the multiple three character alphabetic department codes to which the user is to have access.

If the user is to have access to the PCRS records of an entire secretariat please check the PCRS Secretariat box and enter the three character alphabetic code of the secretariat.

If PCRS Other is checked, detail the access required in the space beside the word "Other".

HR DATA:
HR SUMMARY: Security officers will be informed when the HR data is available. Please check only one box for Paris data access. If HR Departmental Access is checked, the user will have access to view HR data for the department represented by the first three characters of his UAID.

If HR Organizational is checked, please enter the four character numeric organizational code(s) to which the user is to have access OR enter the multiple three character alphabetic department codes to which the user is to have access.

If the user is to have access to the HR data records of an entire secretariat please check the HR Secretariat box and enter the three character alphabetic code of the secretariat.

HR DATA DETAIL:
Please check only one box for HR Data access. If HR Departmental Access is checked, the user will have access to view HR data for the department represented by the first three characters of his UAID.

If HR Organizational is checked, please enter the four character numeric organizational code(s) to which the user is to have access OR enter the multiple three character alphabetic department codes to which the user is to have access.

If the user is to have access to the HR data records of an entire secretariat please check the HR Secretariat box and enter the three character alphabetic code of the secretariat.

SECURITY OFFICER SIGNATURE:
If the completed form is sent through electronic mail, the signature is the electronic "sent from". If the completed form is faxed, mailed through interoffice mail or postal mail, or delivered by any method other than electronic mail the Warehouse security officer for the agency must sign the form prior submitting the form to ISU for processing.

SECURITY OFFICER PHONE:
Please complete the telephone number including the extension. The number may be used to ask questions to clarify the completed form and/or to notify of the status of the processing of the form.

SECURITY OFFICER NAME (print):
Please print the name of the security officer in a clear legible manner. If the signature and/or the printed name of the security officer cannot be read the form cannot be processed.

COMMENTS:
Please enter comments, if any.

WHERE TO SEND:

Upon completion of the form, send to	Information Technology Division MA Information Technology Center Information Security Unit 200 Arlington Street, Suite 2100 Chelsea, MA 02150
or fax to	(617)660-4405
or email to:	Security.ITD@ITD.state.ma.us

3/98

INFORMATION WAREHOUSE

PROFESSIONAL LIABILITY STATEMENT

Information queried by users may be manipulated in a number of ways, thus producing unanticipated results; therefore, this information should be carefully reviewed. Data downloaded from the Warehouse must be protected by the user. It is the responsibility of the user to know and adhere to, the guidelines provided by the CIW group in the use the Warehouse and the information derived therefrom.

I, the user, have read and understand my obligations. I am responsible for the use of the information of the Warehouse.

_____

Name(printed)/UAID

_____

Signature/Date

Commonwealth of Massachusetts

Information Warehouse

GOVERNMENTAL ACCESS REQUEST FORM

TYPE OF REQUEST: ☐ **NEW** **DATE:** _____

☐ **CHANGE (INCLUDE ALL INFORMATION* UAID:** _____

☐ **DELETE** **Department Code:** _____

Employee Name: **LAST:** _____ **SS # :** _____

FIRST: _____

M. I.: _____

MMARS DATA:

☐ MMARS Departmental Access(User Department Only).

☐ MMARS
Multi-Department(List Departments): _____ _____ _____
Secretariat:(Enter Secretariat Code): _____

☐ Other_____

PCRS DATA:

☐ PCRS Departmental Access(User Department Only).

☐ PCRS Secretariat
Multi-Department(List Departments): _____ _____ _____
Secretariat:(Enter Secretariat Code): _____
Organizational(List Org Codes): _____ _____ _____

☐ Other_____

HR Data SUMMARY:

☐ PARIS Departmental Access(User Department Only).

☐ PARIS Secretariat
Multi-Department(List Departments): _____ _____ _____
Secretariat:(Enter Secretariat Code): _____
Organizational(List Org Codes): _____ _____ _____

☐ Other_____

Hr Data DETAIL:

☐ PARIS Departmental Access(User Department Only).

☐ PARIS Secretariat
Multi-Department(List Departments): _____ _____ _____
Secretariat:(Enter Secretariat Code): _____
Organizational(List Org Codes): _____ _____ _____

☐ Other_____

Security Officer Signature: _____ **Phone:** _____

Security Officer Name(print): _____

Comments: _____

_____

_____

*** "When requesting changes to an established profile, please be sure to fill out the form with the complete profile, as well as any requested additions or deletions."**

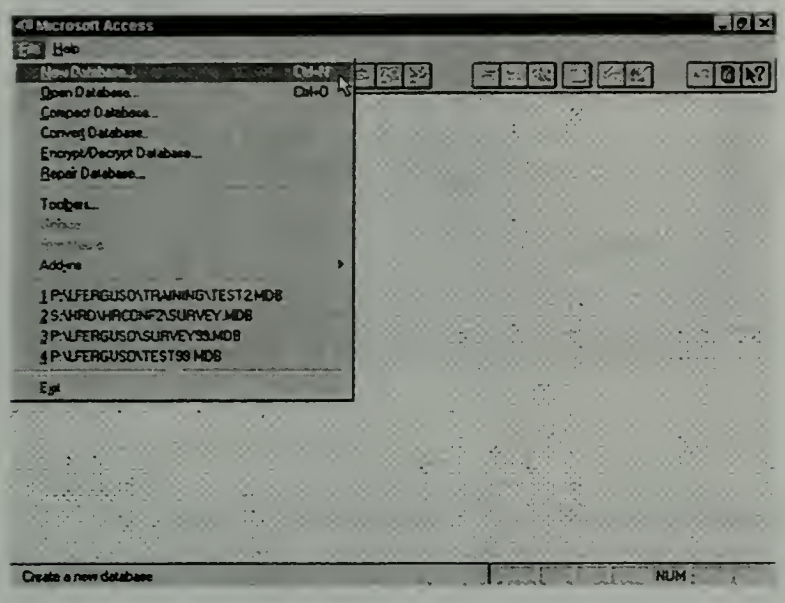
Please Return to.
Information Technology Division
Mass Info Technology Center
Information Security Unit
200 Arlington Street,Suite 2100
Chelsea, Mass 02150
FAX (617) 660-4405
or
EMAIL. SECURITY ITD@ITD STATE MA US

Using Access 2.0 (Windows 3.1) in the Information Warehouse

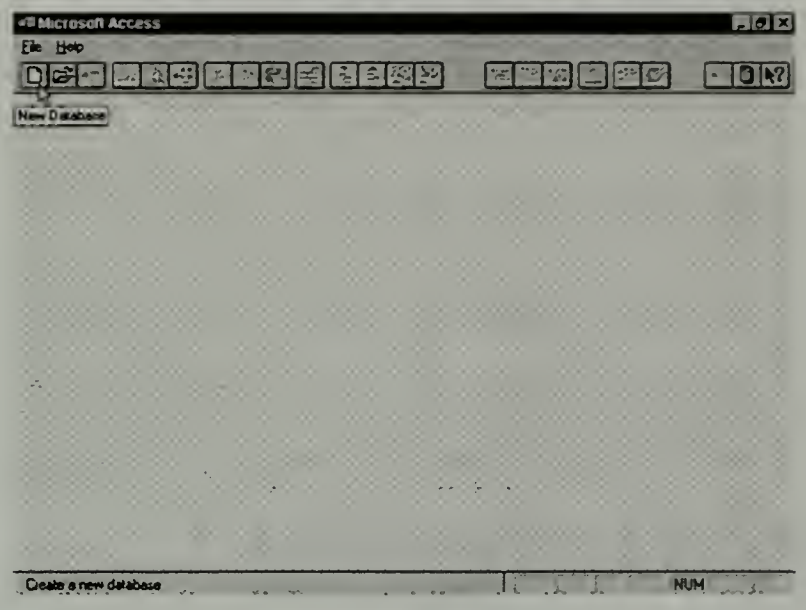
Using Access 2.0 to access the Warehouse

Step 1:

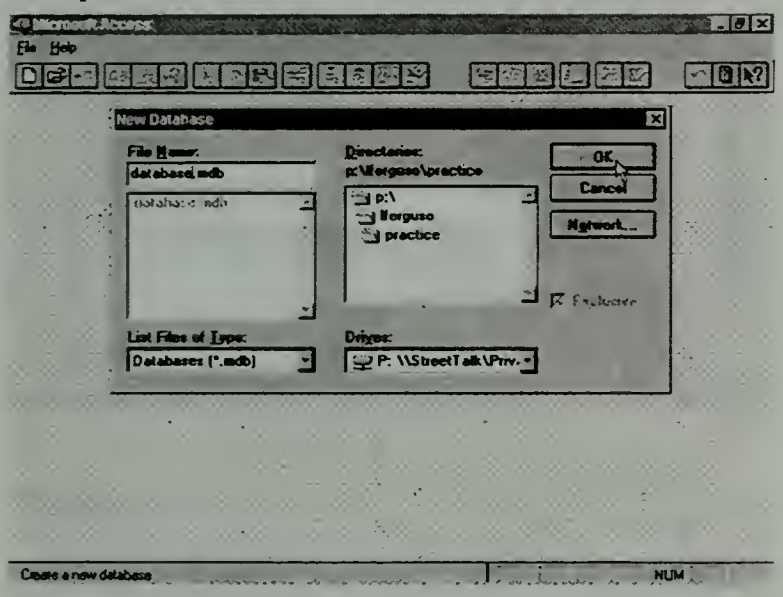
❖ Highlight File Click on New Database



❖ Choose first icon from the left.



Step 2:

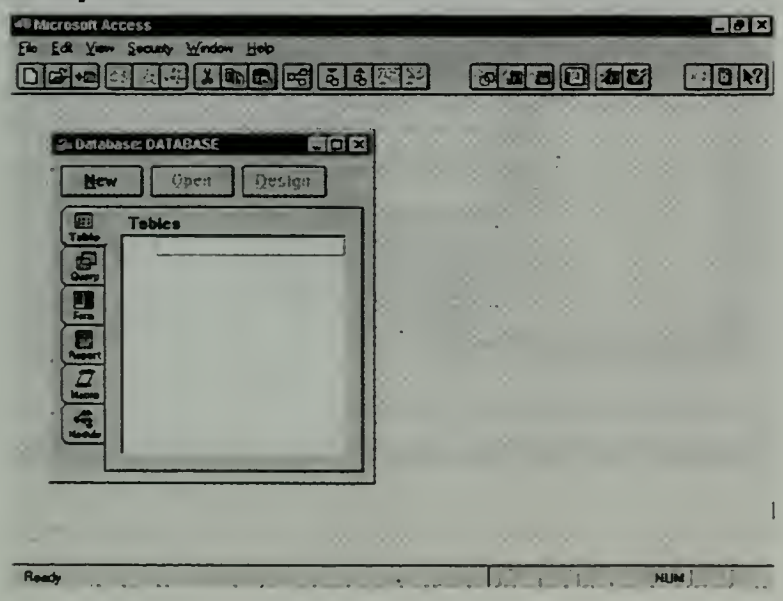


1. The New Database window will pop up.

2. Change the file name at the bottom of the screen from db1 (under file name).

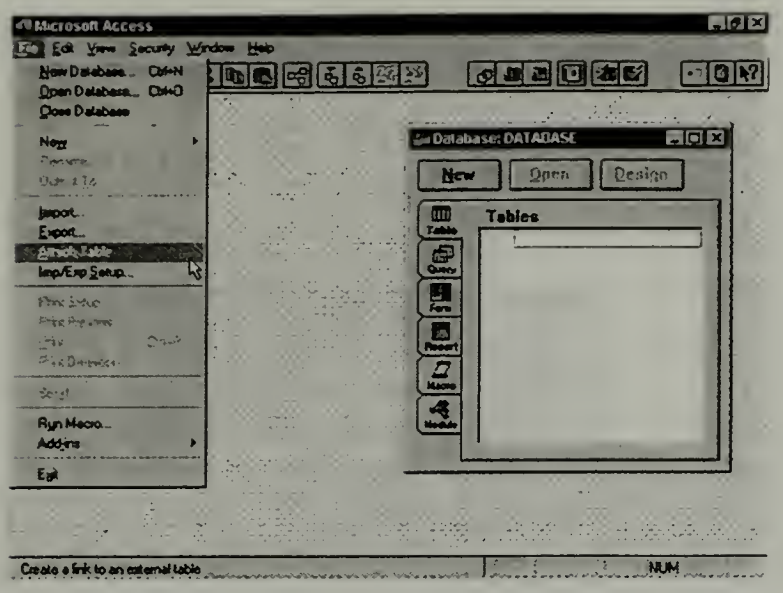
3. Then click "OK".

Step 3:



❖ The Database window should now appear.

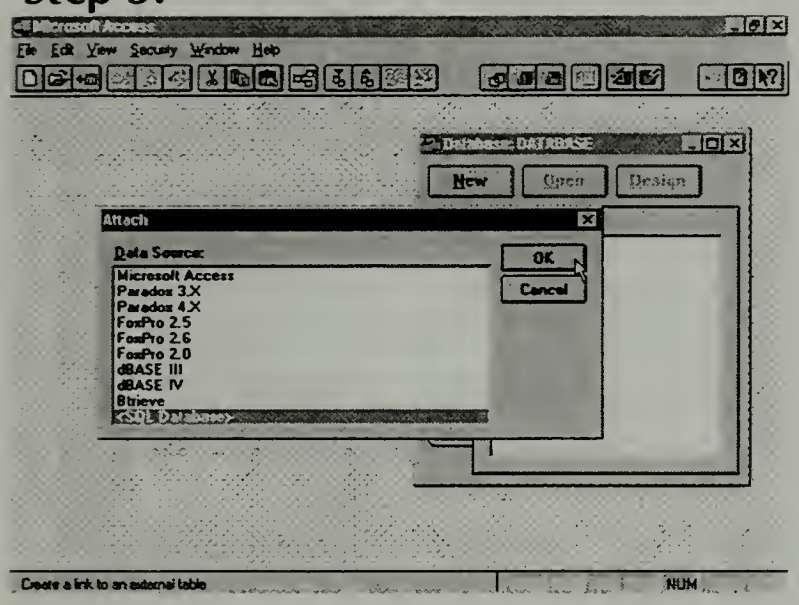
Step 4:



- ❖ We need to attach the Warehouse tables.

1. Click on "file".
2. Click on "Attach Tables".

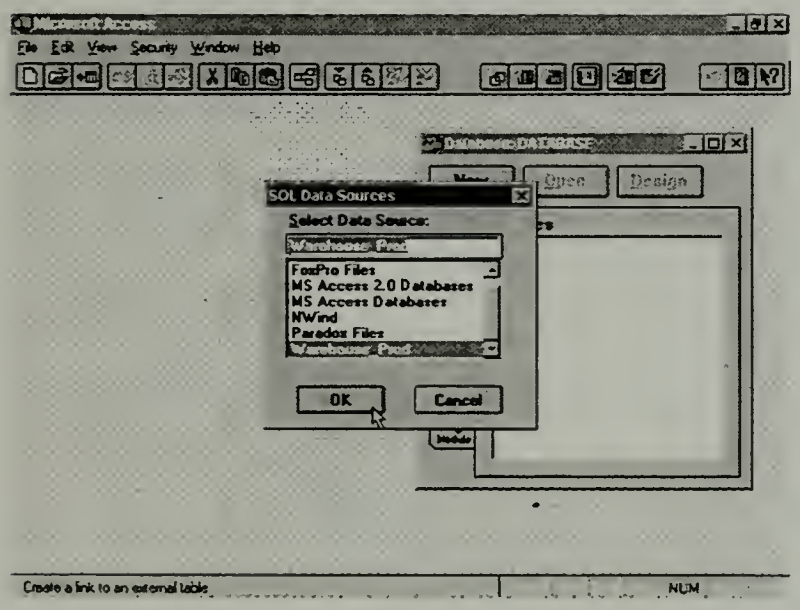
Step 5:



- ❖ It will then ask what data source you want to select.

1. Highlight SQL Database.
2. Click "OK".

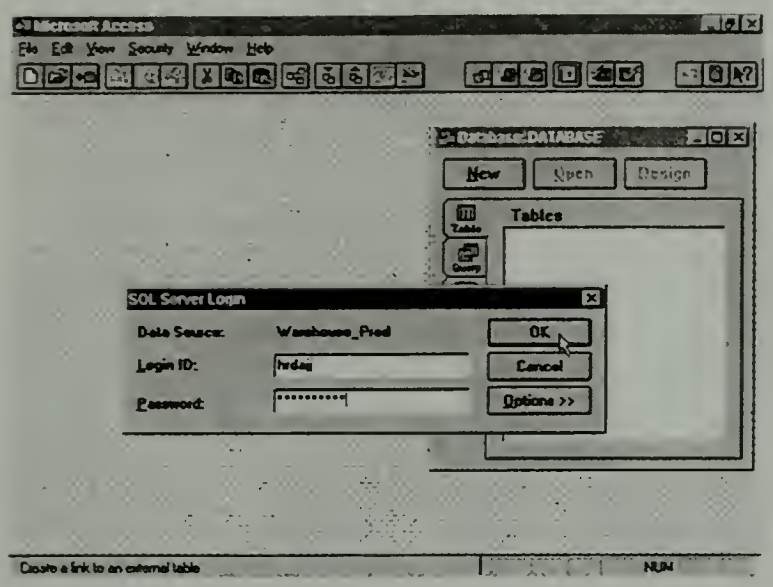
Step 6:



- ❖ We need to select our data source.

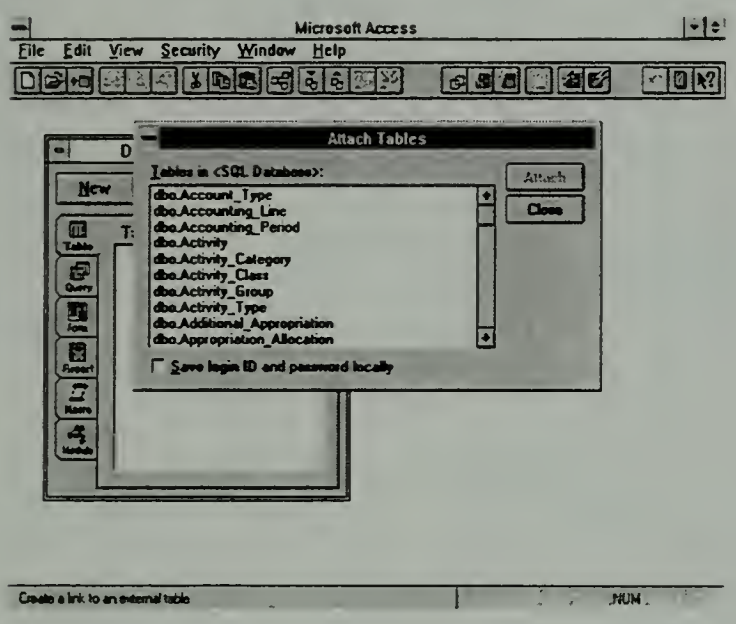
1. Choose "Warehouse_Prod".
2. Click "OK".

Step 7:



1. Type your login ID.
2. Hit the <Tab>.
3. Type your password.
4. Click "OK".

Step 8:



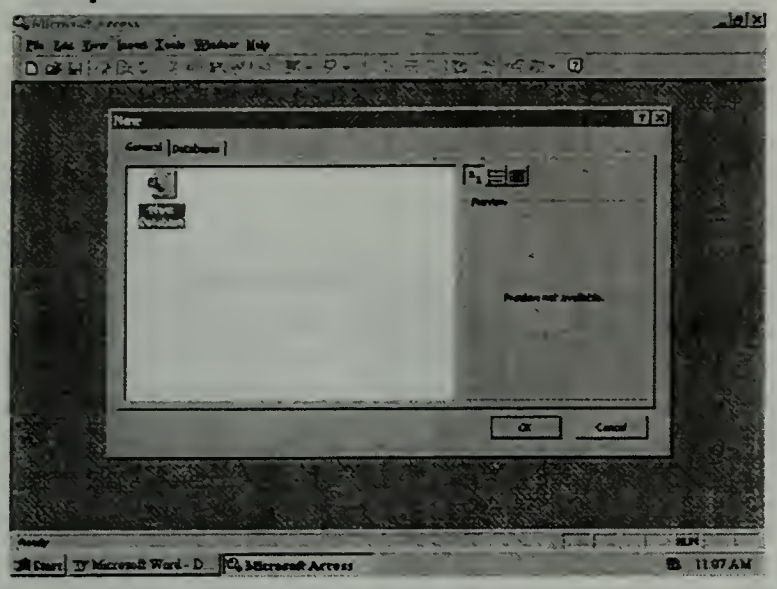
- ❑ Now that you have clicked on OK, you can select the tables that you will need.
- ❑ Highlight a table name and if you only need that one table,
- ❑ Click on "OK".
- ❑ If you need more than one table, highlight the first table you need, then highlight the second and the third and soon until you have all tables you need selected.
- ❑ Notice that there is no need to hold down the ctrl key when selecting multiple tables.
- ❑ Click on "OK".

We are now ready to build our query!!!

Using Access 7.0 (Office '95) in the Information Warehouse

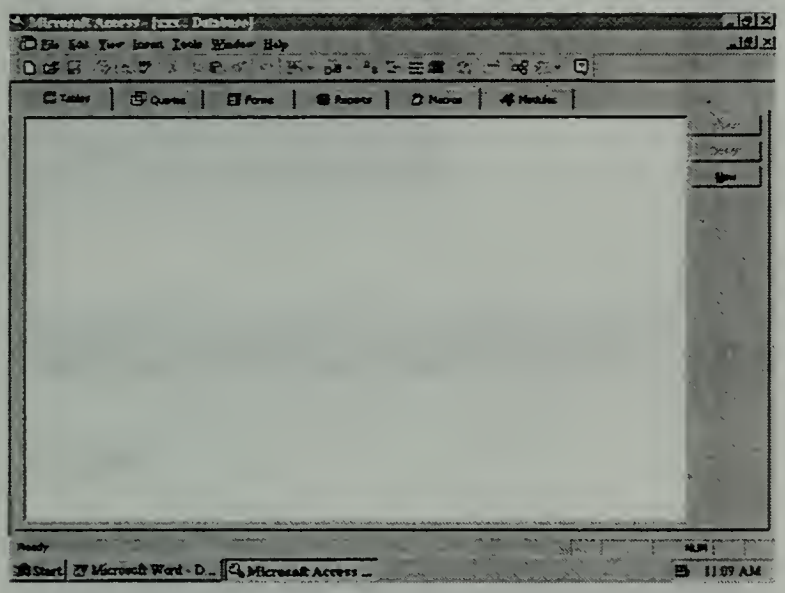
Using Access 7.0 to access the Warehouse

Step 1



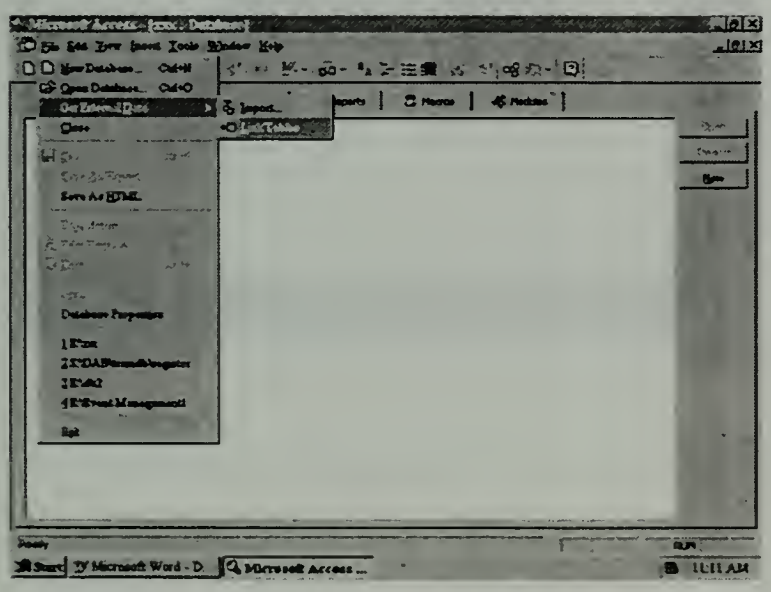
1. Click on "File".
2. Click on "New Database".
3. Click on "Blank Database".
4. Click on "OK".
5. Change the file name at the bottom of the screen from db1.mdb.
6. Click on "Create" at the right side of your screen.

Step 3



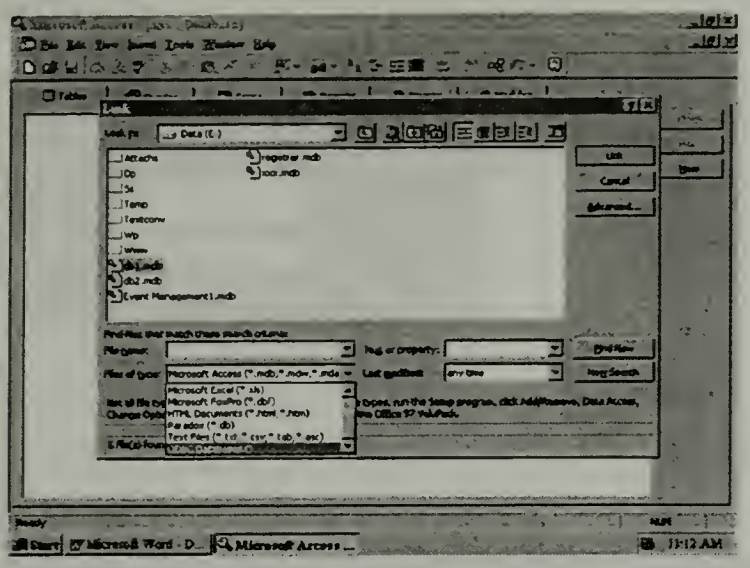
1. Maximize your window so it looks like this. Use the maximize button on the right side of the screen.

Step 3:



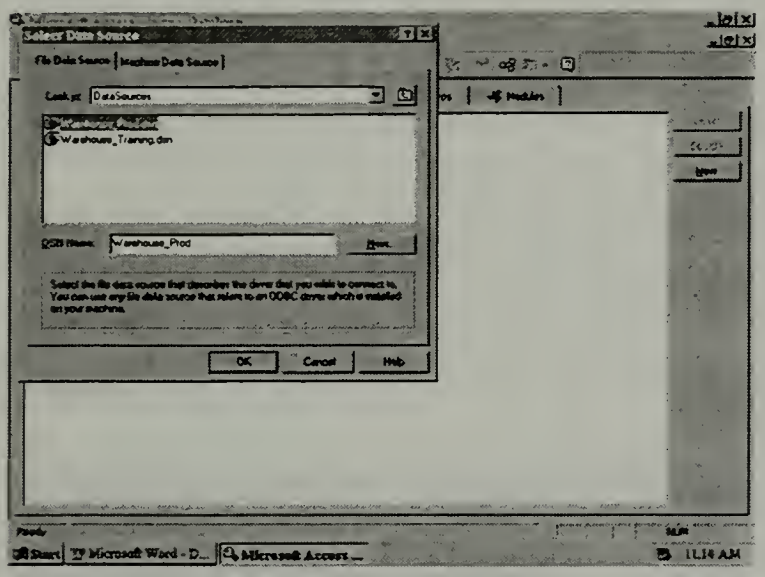
1. Click on "File".
2. Click on "Get External Data"
3. Click on "Link Tables".

Step 4:



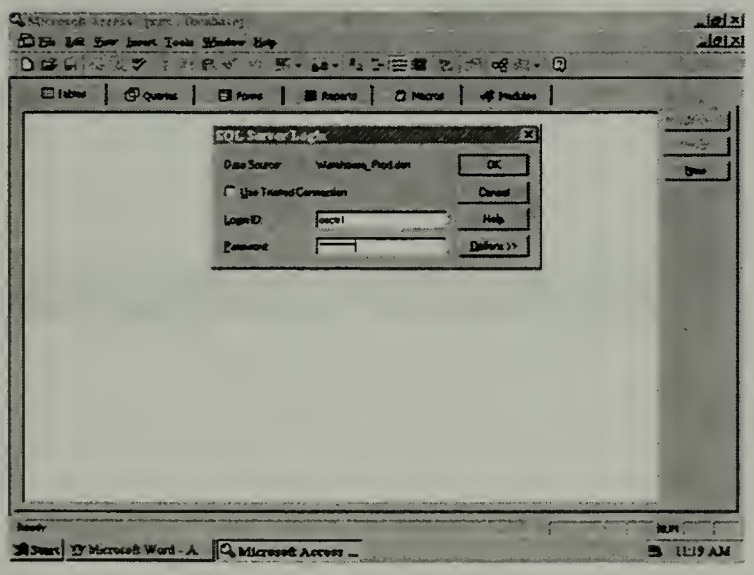
1. Under **files of type**, scroll down until you find "ODBC database", and highlight.

Step 5:



1. Click on the "Machine Data Source" Tab
2. Select "Warehouse_Prod".
3. Click on "OK".

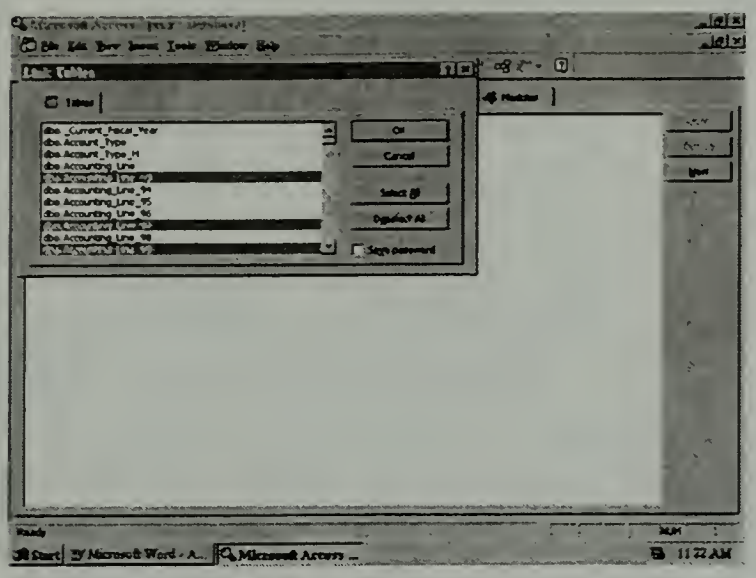
Step 6:



1. Type in your login ID.
2. Hit the <Tab>.
3. Type in your password.
4. Click on "OK".

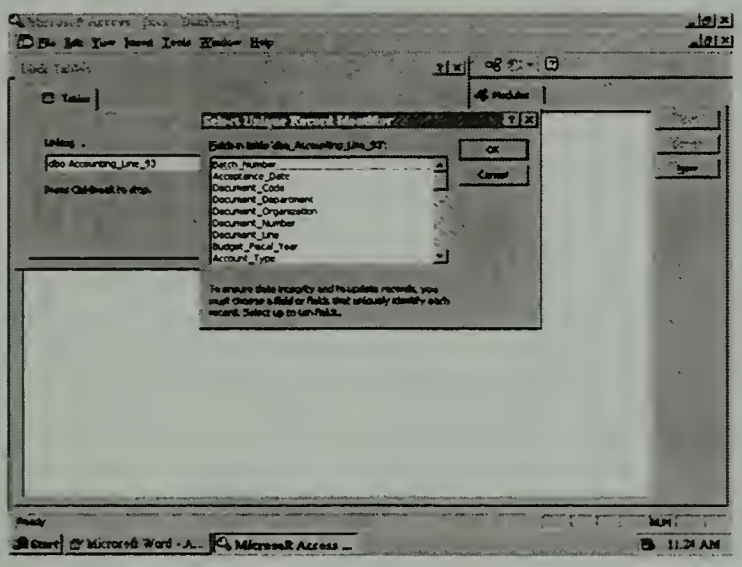
Note: Your Login ID is your UAID number and your password is your UAID followed by the last four numbers of your social security number, with no spaces between the numbers.

Step 7:



- ❑ Now that you have clicked on OK, you can select the tables that you will need.
- ❑ Highlight a table name and if you only need that one table,
- ❑ Click on "OK".
- ❑ If you need more than one table, highlight the first table you need, then highlight the second and the third and soon until you have all tables you need selected.
- ❑ Notice that there is no need to hold down the ctrl key when selecting multiple tables.
- ❑ Click on "OK".

Step 8:



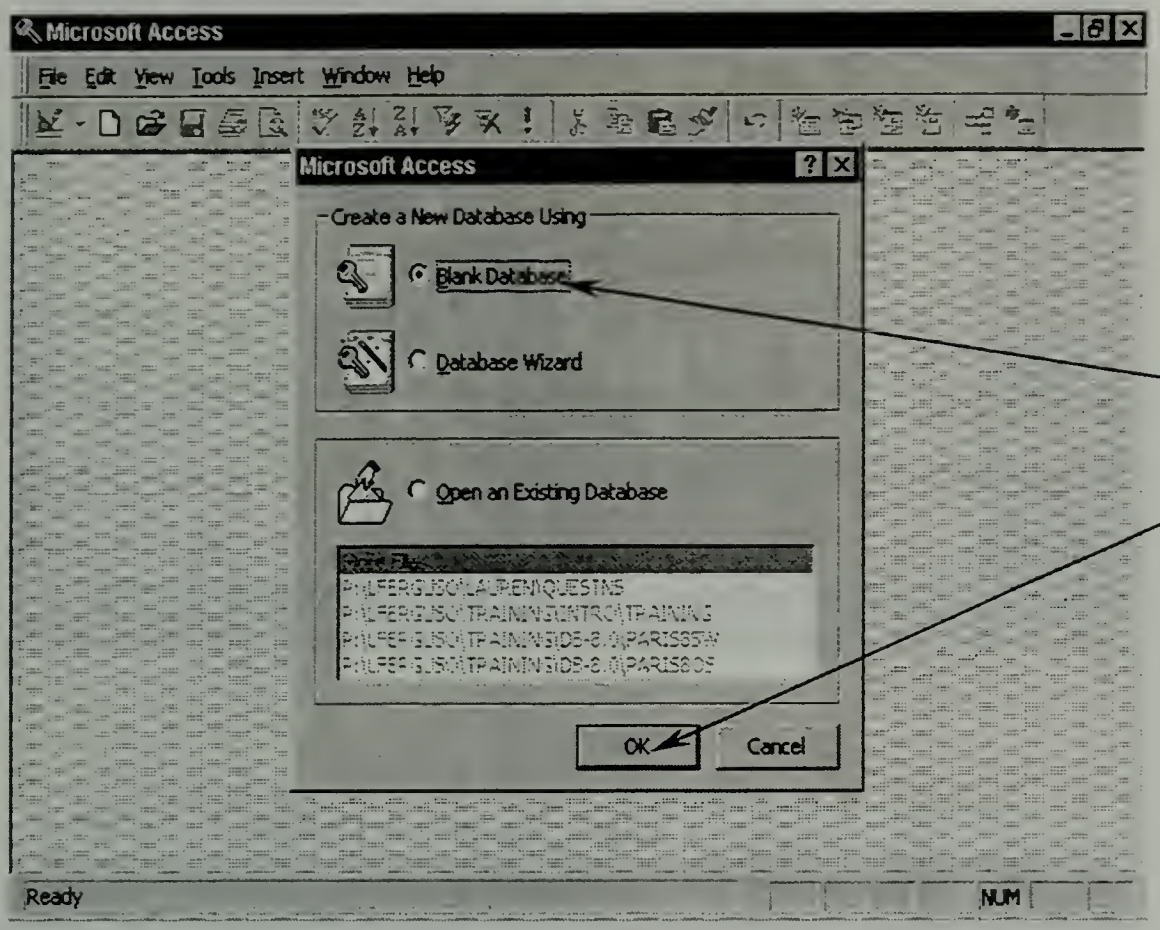
- ❑ When "Select Unique Record Identifier" appears, click on "OK".
- ❑ Continue clicking on "OK".
- ❑ This window will appear for every table that you selected.
- ❑ We will choose our fields later.

We are now ready to build our query!!!!

Using Access '97 (Office '97) in the Information Warehouse

Using Access '97 to access the Warehouse

Step1: Opening a Blank Database



1. Double Click on the Access Icon on your desktop.

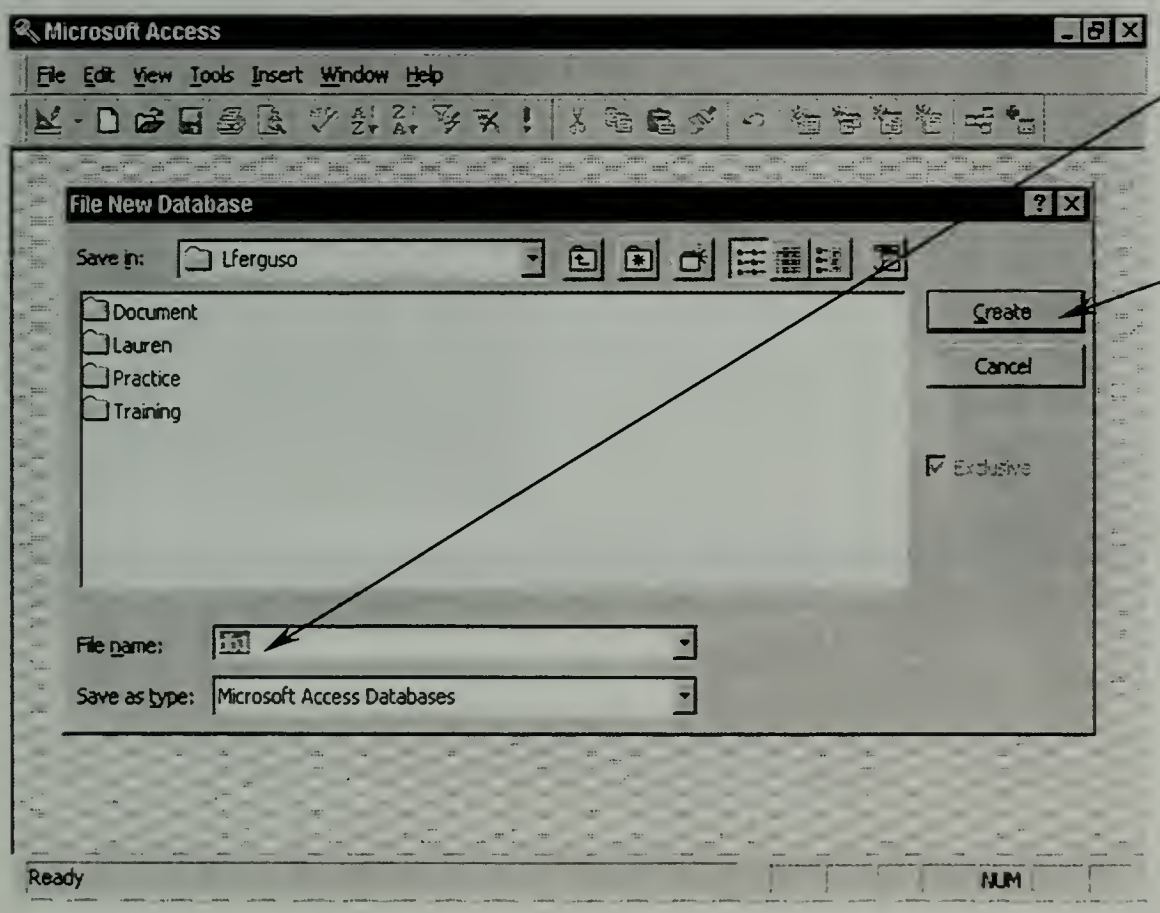
   OR

   Open Access from your start menu.

2. Click on "Blank Database".

3. Then Click on "OK".

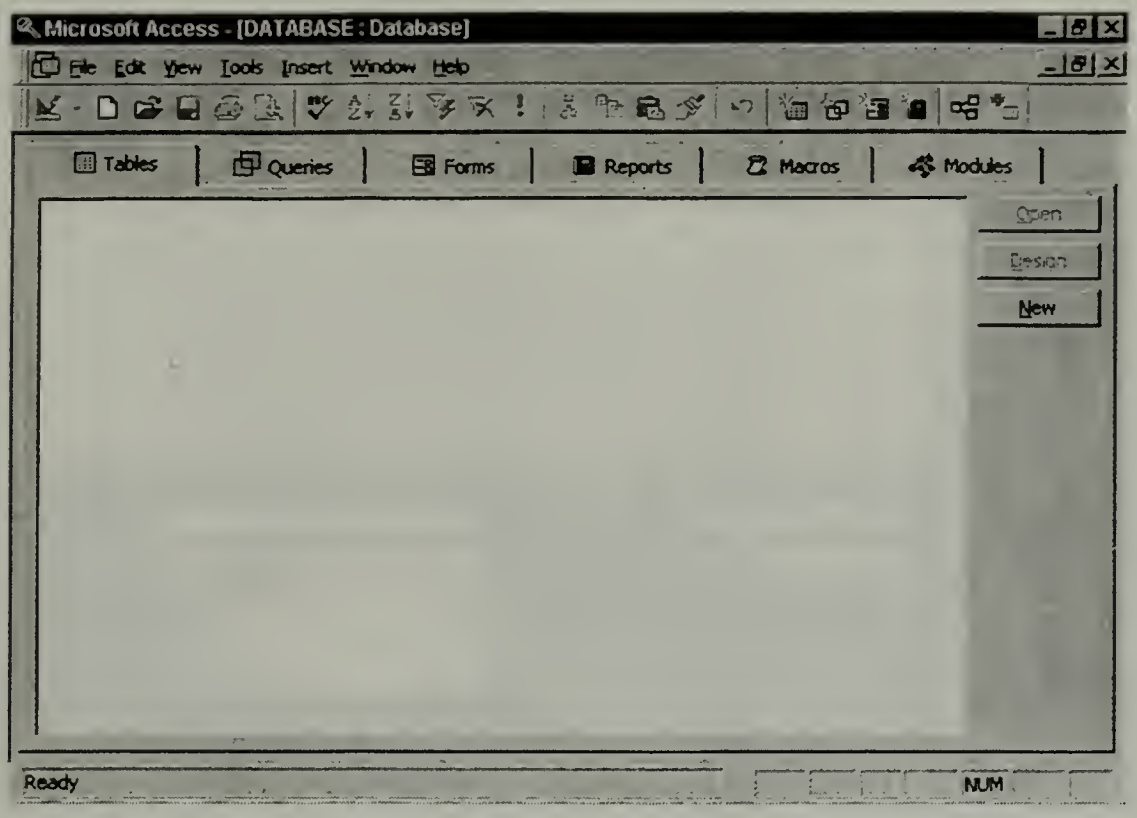
Step 2: Creating a New Database



1. Change the file name at the bottom of the screen from "db1".

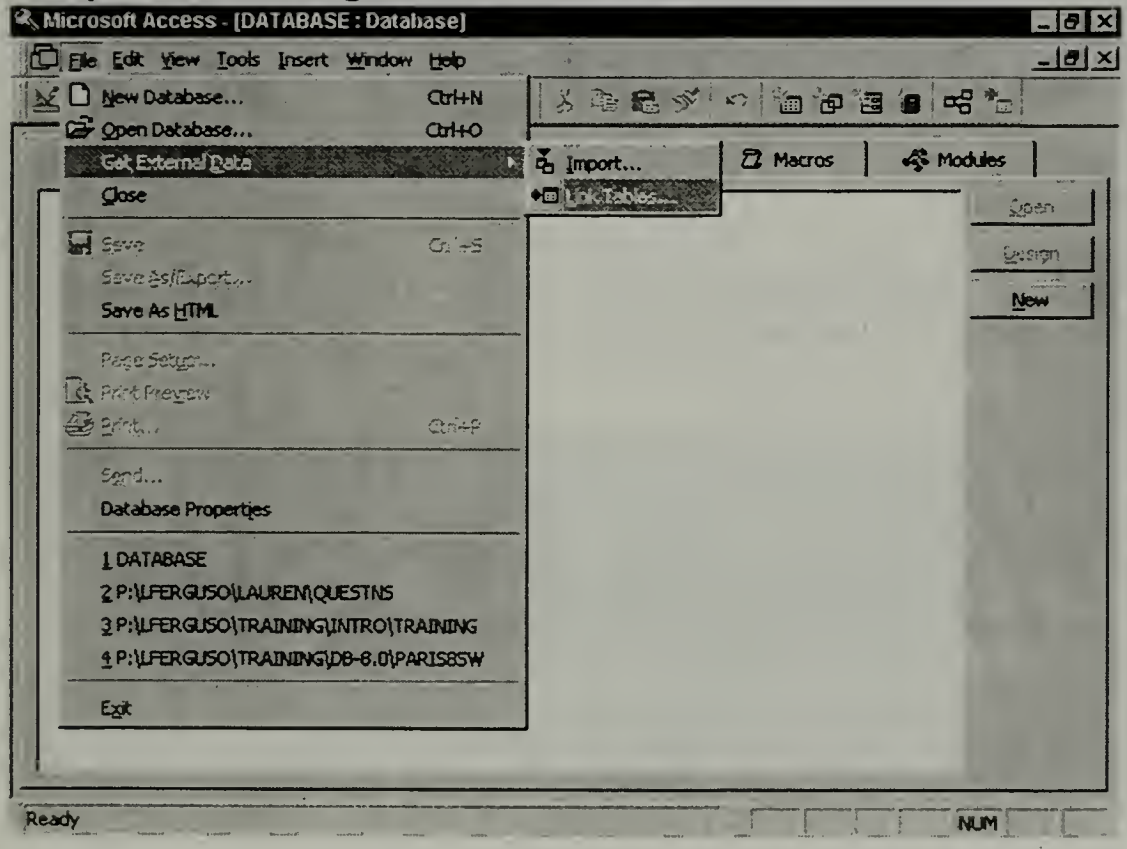
2. Then click on "Create".

Step 3:



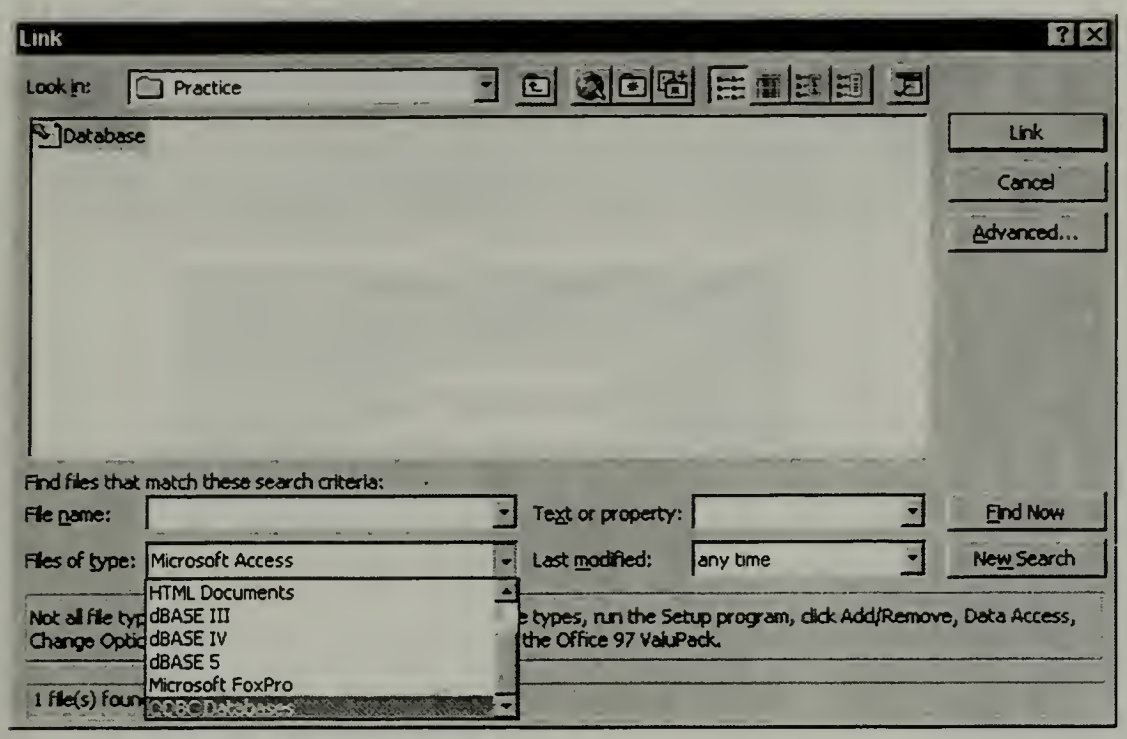
1. Maximize your window to look like this.

Step 4: Getting External Data



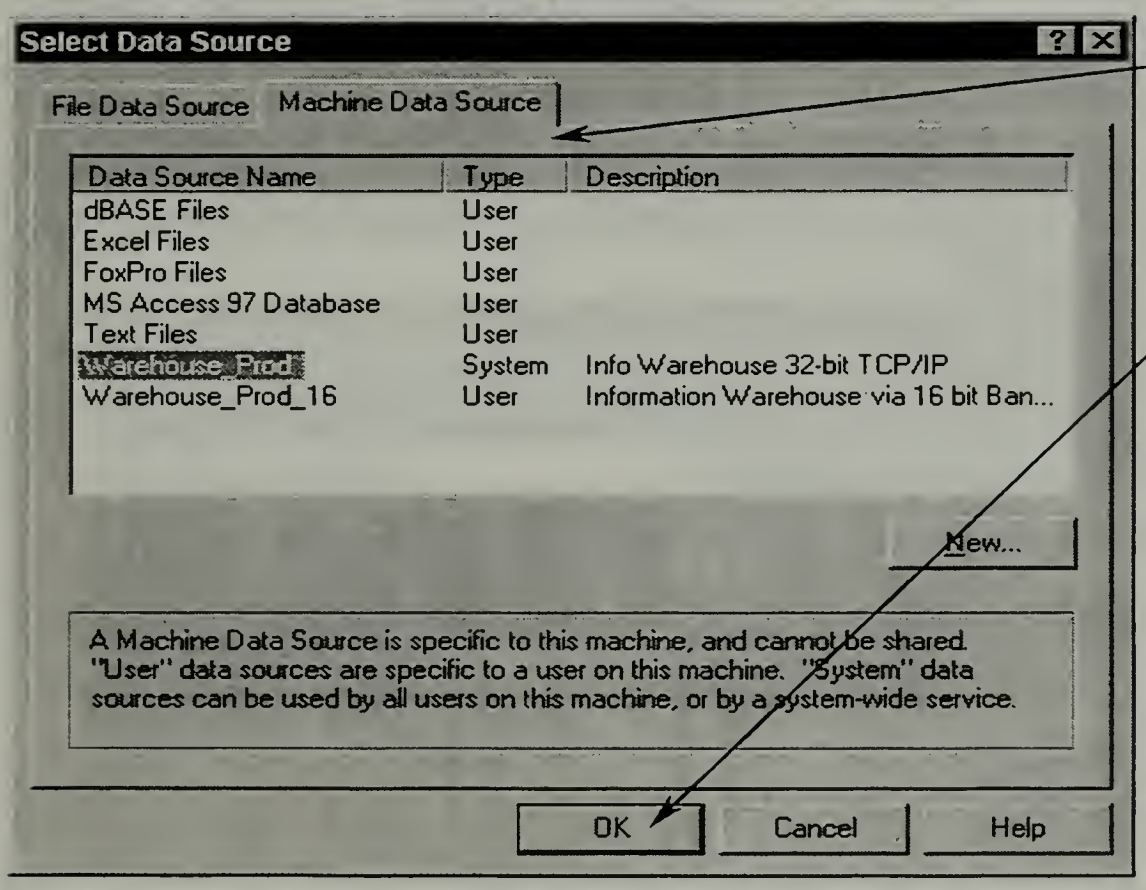
1. Click on "File".
2. Click on "Get External Data".
3. Click on "Link Tables".

Step 5:



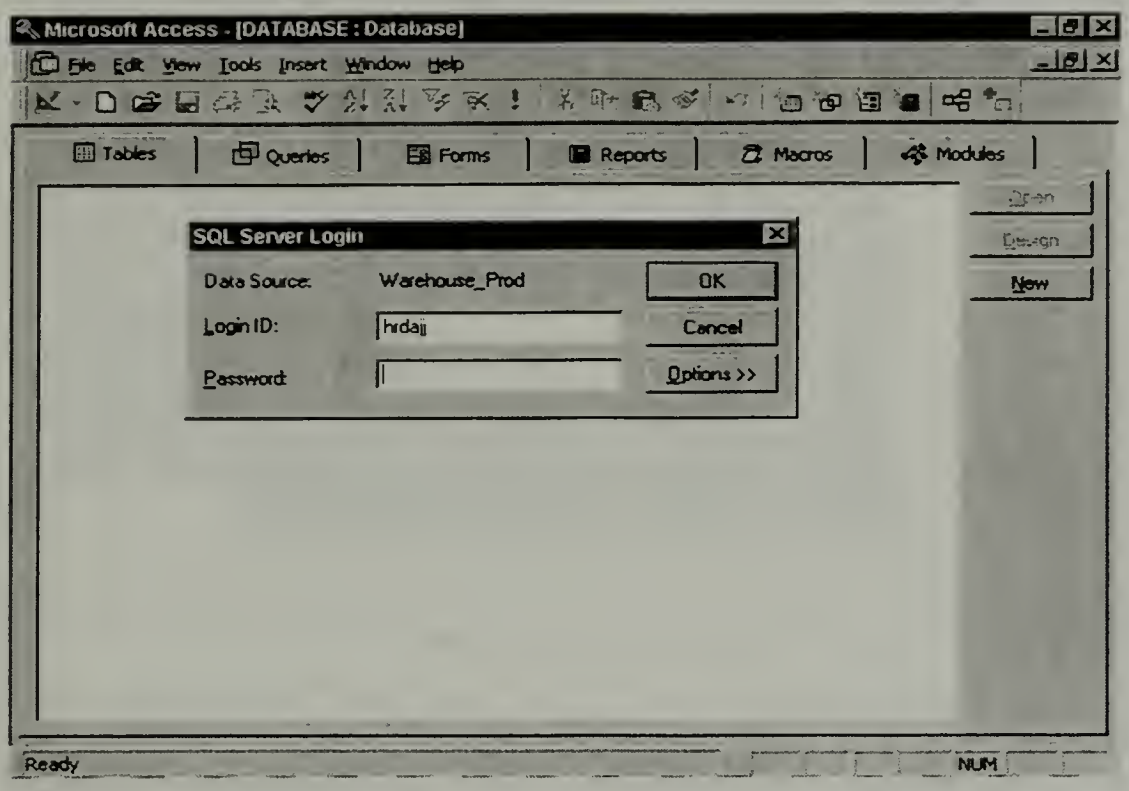
1. Under **files of type**, scroll down until you find "ODBC database" and highlight.

Step 6: Select your Data Source



1. Click on the "Machine Data Source" Tab.
2. Select Warehouse_Prod.
3. Click "OK".

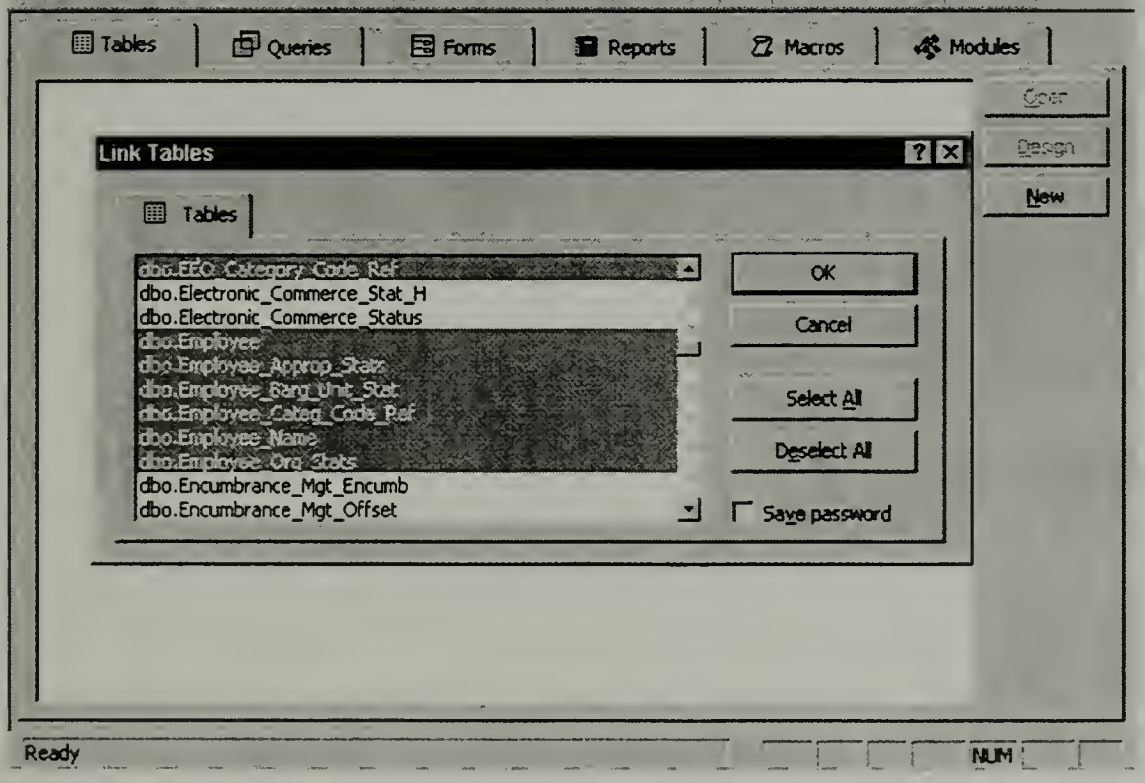
Step 7: Logging into the Warehouse



1. Type in your login ID.
2. Hit the <Tab>.
3. Type Your Password.
4. Click "OK".

Note: Your Login ID is your UAID followed by the last four digits of your social security number, with not spaces in between the numbers.

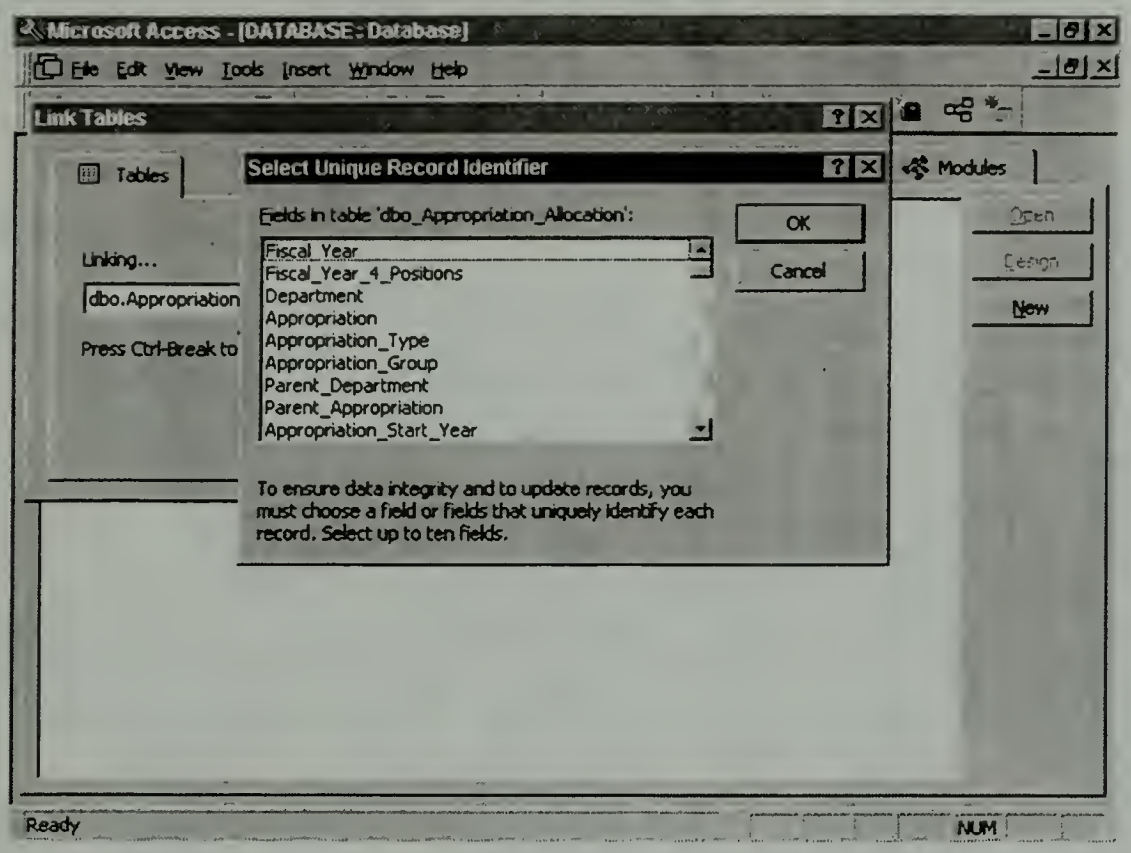
Step 8: Selecting Tables to Attach



- You can now select the tables that you will need.
- Highlight a table name and if you only need one table and then click "OK".
- You can highlight more than one table.
- Scroll down to find the next one and click on that table name. Only select the tables that you will need to link.
- Once you have selected all the tables you need click "OK".

NOTE: You **do not** need to hold down the <Shift> or the <Ctrl> keys.

Step 9: Attaching Tables



- When "Select Unique Record Identifier" appear, just click "OK".
- Continue to click on "OK".
- This window will appear for every table you are trying to link to.
- We will choose our fields later.

We are now ready to build our query!!!!

Building a Query with HR Data in the Information Warehouse

Building a Query with HR Data in the Warehouse

There are 8 basic steps to creating a query with HR data in the Warehouse:

1. Define your query.

Before you even log into the Warehouse, take some time to think about your query in terms of a **clear and specific question**. The Warehouse is a big place, and you want to get in and out with your answers as quickly as possible. A well-stated question will help you find what you need in less time.

Before you log into the Warehouse, think carefully about what you need.
Always put your question down on paper. Writing it out will help you visualize your results before starting.

Limit the focus of your query to answer just one specific question.
If you have a complex query to run, try building a simple one first. See how it works. Then, use it as a building block to get to the more complex version.

2. Choose your tables.

Now that you've narrowed your question down to its particular function(s), you'll select the appropriate table(s) from which to retrieve your data.

Which specific tables should you use? There's really no formulaic answer. The best suggestion we can make is this – browse around in the various tables. If a particular field looks unfamiliar to you, try a query against the Data Dictionary tables.

3. Attach your tables.

Now it's time to select the particular fields you want within the table(s) you know you need. The first thing to do is add/attach the table(s) you need so you can scroll through and look at the fields contained within each.

4. Choose your fields.

At this point, we aren't concerned with selecting fields in order to set criteria (by "set criteria", we mean that you'll eventually need to tell the Warehouse what *Department* you want, what *Budget_Fiscal_Year*, etc.) We'll cover setting criteria in Step 7.

5. Types of joins &
6. Create your joins.

When you're using more than one table in your query, you need to create joins. In essence, joins help your query realize that the information in one table is related to the information in another by virtue of certain fields that they have in common.

7. Refine your query.

Criteria are parameters you set on the scope of your question. They tell the Warehouse exactly what information you need. Because criteria limit the scope of your question, they help your query avoid returning irrelevant data.
If you don't set criteria... your query may perform a "table scan" (meaning it looks through entire tables searching for your data).

8. Run your query.

Since Warehouse tables contain thousands or millions of rows of data, queries involving table scans can take an enormous amount of time and resources on the part of both the desktop (your PC) and the file server (the Warehouse). **For example, scanning a 13 million row table will take 20-30 minutes, will freeze your PC, and may lock other users out of the Warehouse temporarily. Therefore when running a query, make sure that you have set the appropriate criteria.**

① Define your Query

✓ How to test to see if your question is asked correctly:

- Your question should immediately inform you of what your criterion will be set to include or exclude.
- Your question should always be able to answer...
  - Who
  - When
  - Where

✓ Summary tables are always queried for the standard workforce.

Before you begin a query, you must be clear in understanding exactly what you are asking. Here is an example of the kind of question that you might want to ask of HR data in the Warehouse:

Good Q: How many **employees** and **FTE's** does my **department presently** employ?

This question asks about: The standard workforce
A specific department
A specific point of time

This query utilizes a summary table to generate a summary result set and is based on the standard workforce.

Here is an example of the type of question that you do not want to ask...

Bad Q: How many people work here?

If you ask this kind of question, the Warehouse will answer by giving you back information for EVERY department , EVERY available fiscal year & not for the STANDARD workforce... **so remember to be specific.**

② Choose your tables

The next step after formulating a clear and specific question is to decide where the answer is stored in the Warehouse.

There are over 250 database tables in the Warehouse. In order to save yourself a bit of search time, ask yourself

What kind of information do I need?

This will help you to narrow down your choice of tables.

Let's go back to our query question from step ①:

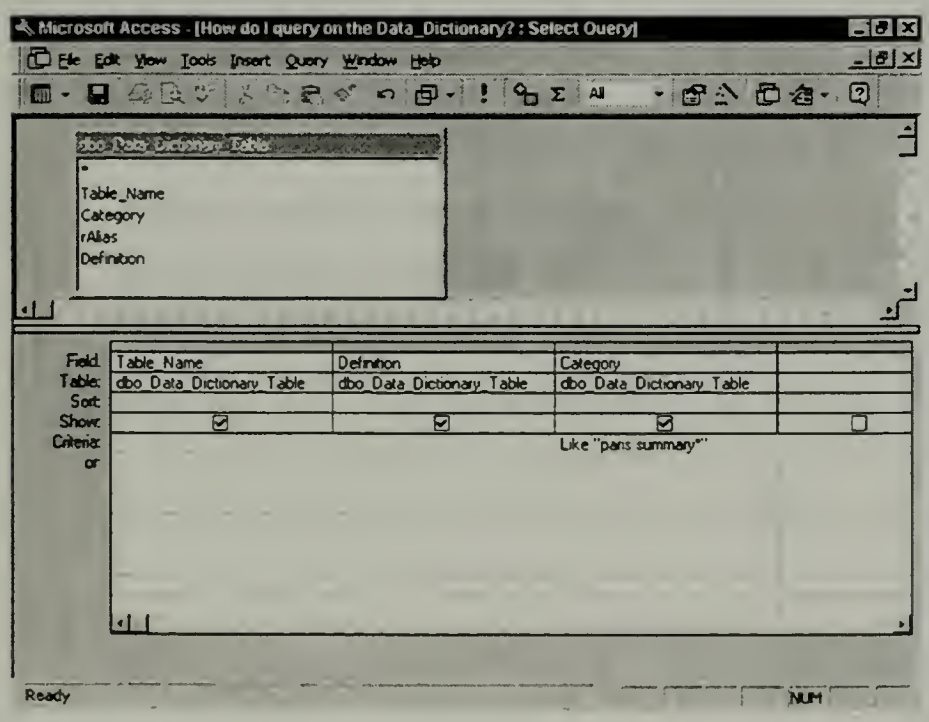
- ☞ We know that this query will use a summary table to generate summary results on the standard workforce.
- ☞ If we look at the Warehouse's structure for PARIS Summary Table Definitions (pages 22-24), we see that **Employee_Org_Stats** contains employee and FTE counts subtotaled by Pay_Period, DEPT-ORG, Appropriation, Position_Type and Work_Status.

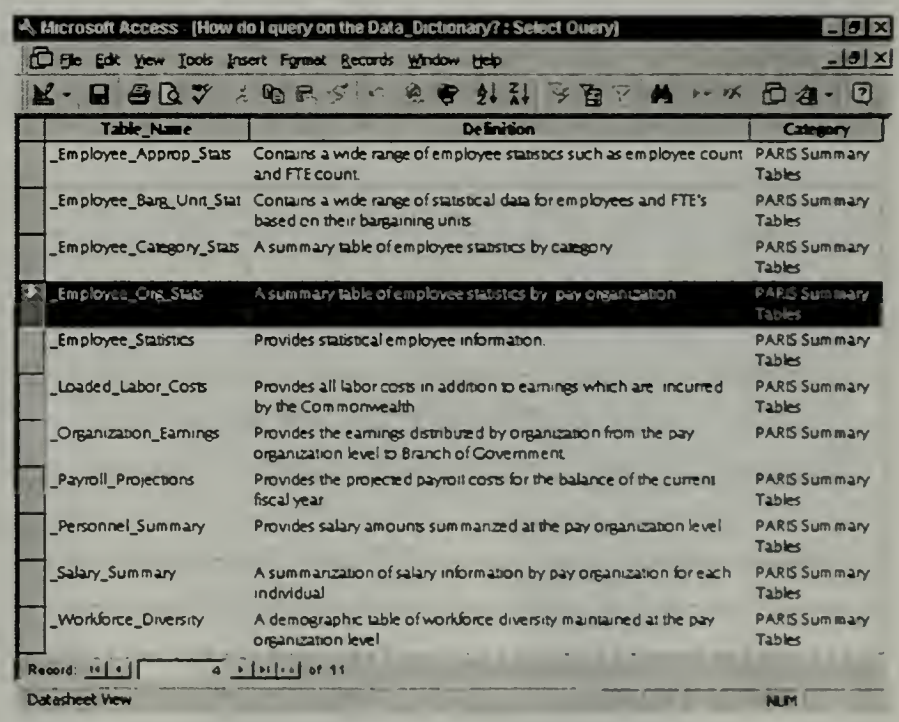
After selecting the appropriate table(s), jot them down on your **Query Building Worksheet**.

✓ Which specific table should you use?

- There is no specific formula.
- The best suggestion is to try to browse around in various tables.
- Query the Data_Dictionary and see if you can find a table for specific fields. (See Page 34).

✓ Whenever possible, pick the most summarized table in the hierarchy for your query. Your query will run much faster.





③ Attaching Tables

Before you can choose your fields, you must:

Add/Attach the table(s) you need.

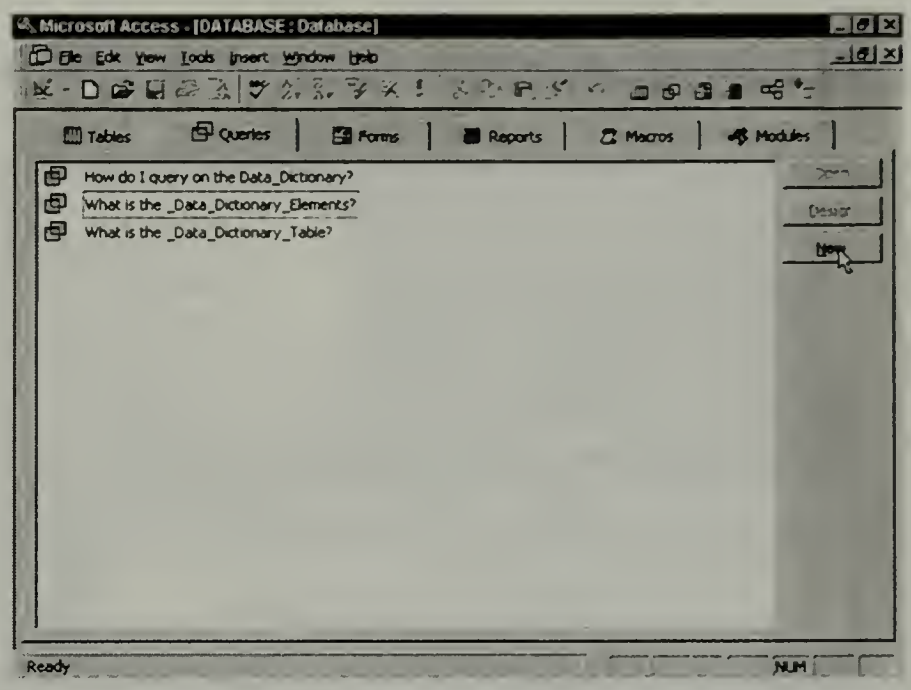
To attach a table follow these steps:

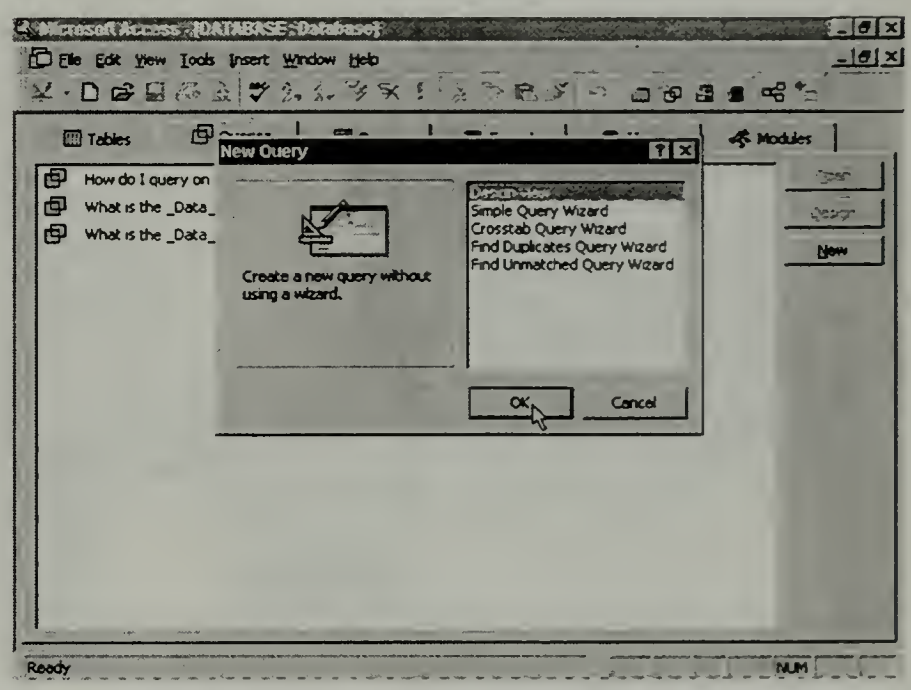
1. Click the "Queries" tab.
2. Click "New".
3. Click "Design View".
4. Click "OK".
5. Highlight the table(s) that you would like to attach.
6. Click "Add".

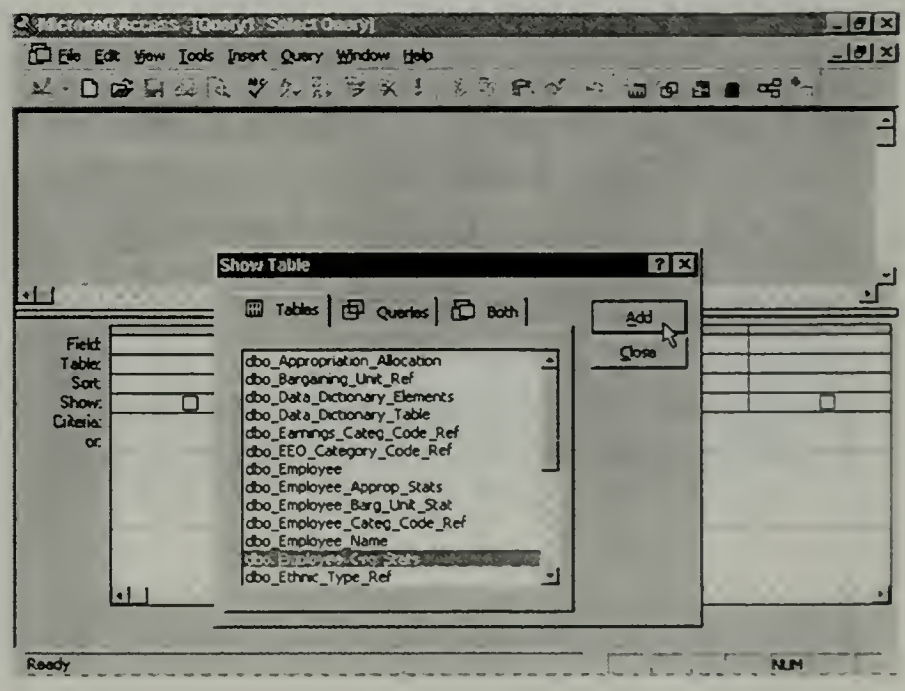
If you need more than one table:

- ➳ Highlight the first table.
- ➳ Scroll down to find the next table.
- ➳ Press the <Ctrl> key.
- ➳ Click on the table name.

7. When you have finished attaching the tables you need, click "Close".







④ Choose your fields

We are now ready to choose our field names for our query.

We can do this one of three ways:

1. Double click on the field name.

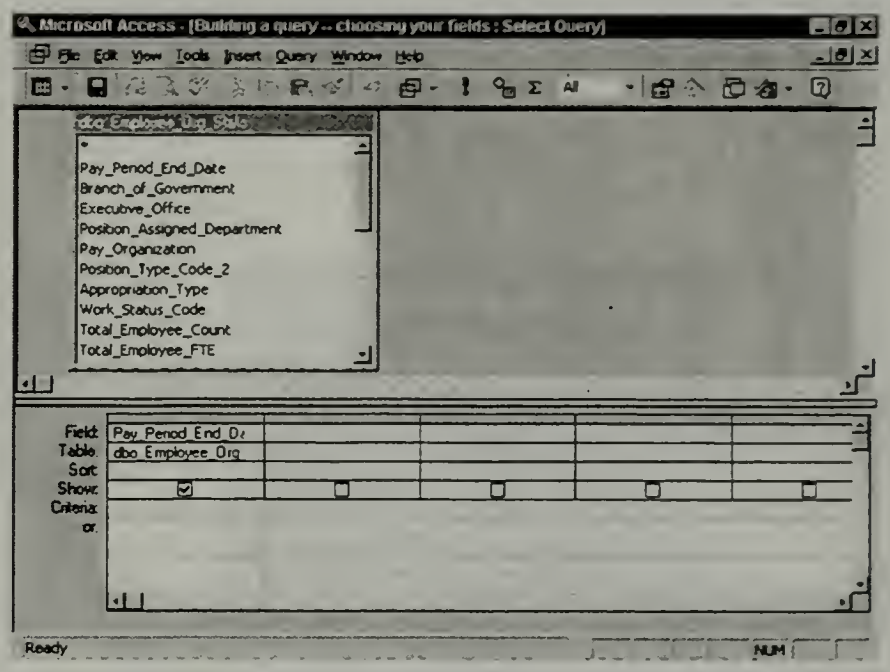
2. Click on the field name;
   Hold down the left mouse button;
   Drag and drop.

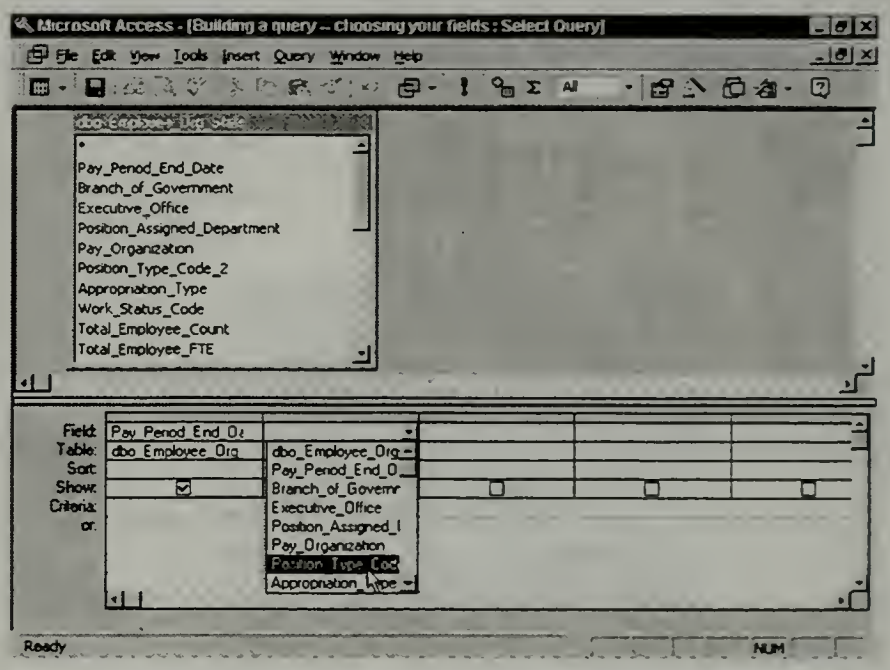
3. Click on a blank cell;
   Click on the drop down arrow;
   Choose the field name that you want.

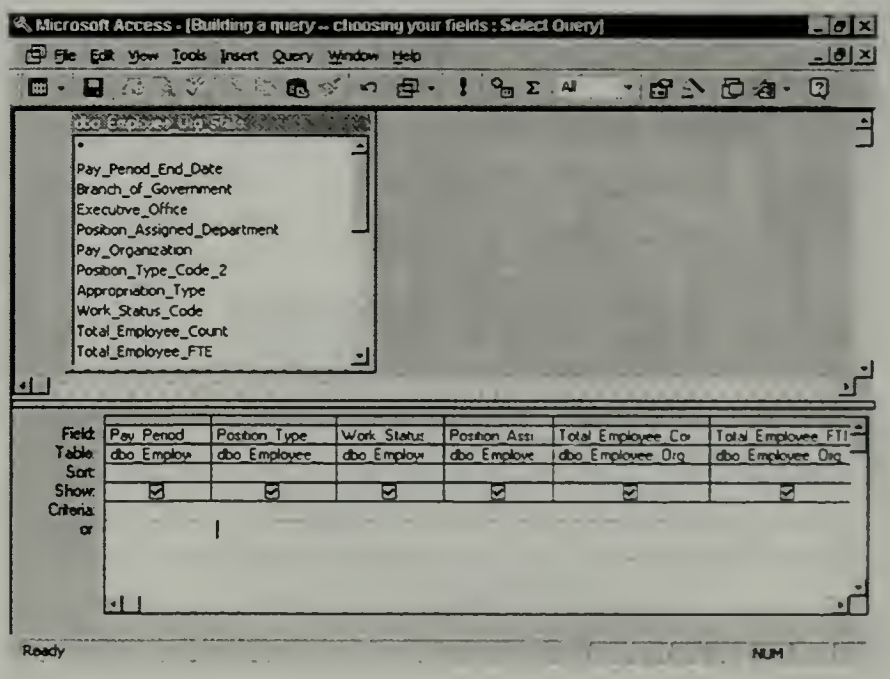
Your query results will be based on the fields you choose:

1. Pay_Period_End_Date
2. Position_Type_Code_2
3. Work_Status_Code
4. Position_Assigned_Department
5. Total_Employee_Count
6. Total_Employee_FTE

We are **not** ready to run the query. We still must set the criteria.







⑤ Types of Joins

When you're using more than one table in your query, you need to create joins. In essence, joins help your query realize that the information in one table is related to the information in another by virtue of certain fields that they have in common.

There are three basic types of joins:

Inner Joins return only rows of data where there's a match between the two tables. Inner joins are the most common type, and are also known as "equi-joins".

Left-Outer Joins return ALL records from the left-hand table and ONLY matching records from the right-hand table. *

Right-Outer Joins return ALL records from the right-hand table and ONLY matching records from the left-hand table. *

* (When we refer to "left-hand" and "right-hand" tables, we simply mean the way they appear on your PC screen when you're creating the join.)

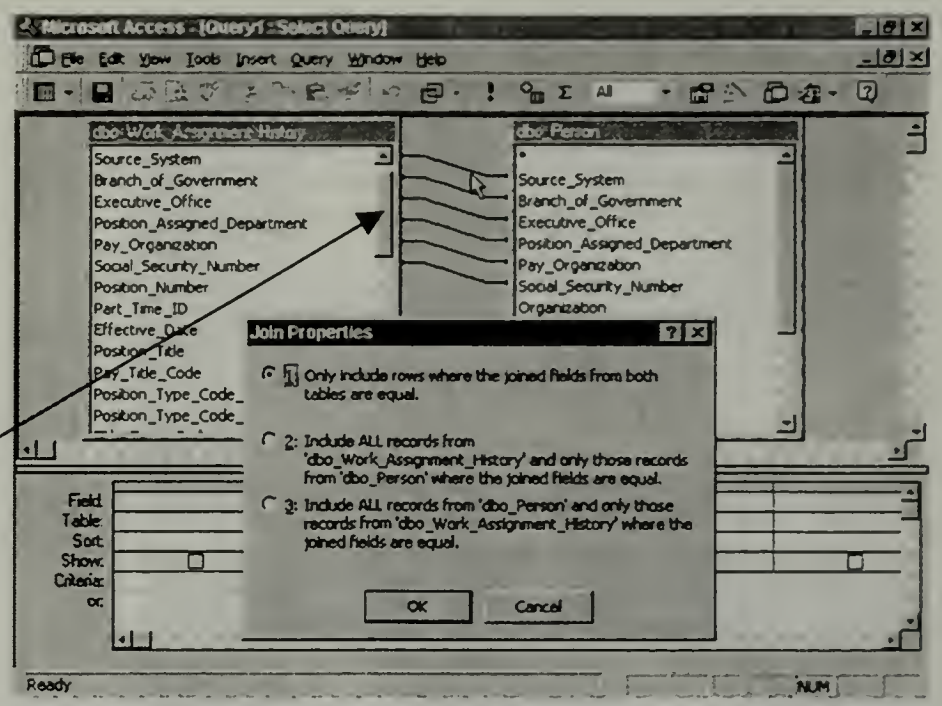
Now, it's pretty much a given that you'll want to create joins whenever you build a query which uses more than one table.

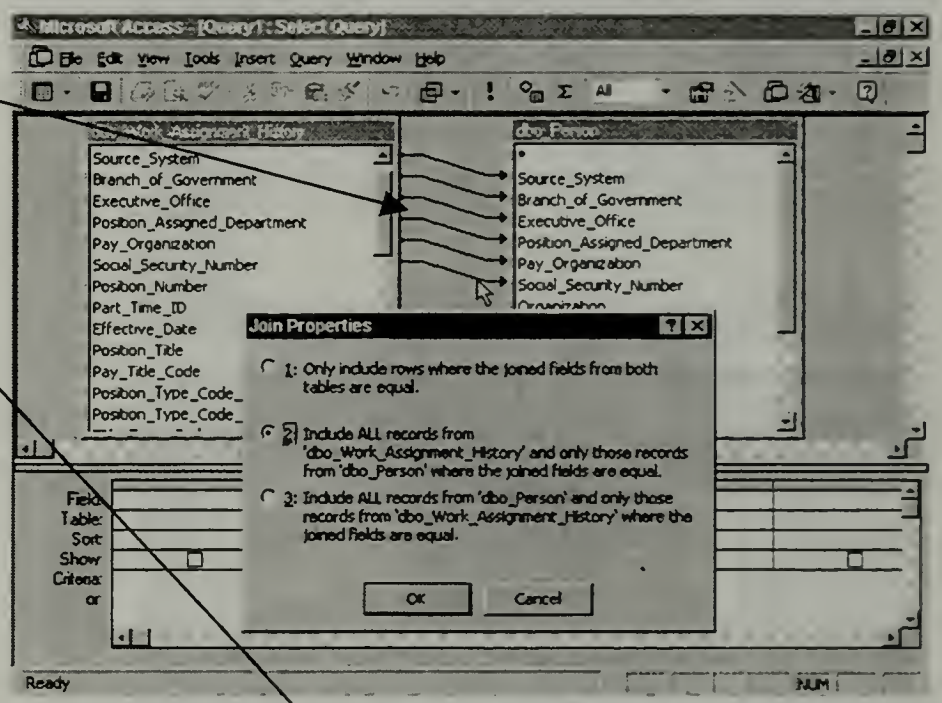
"But which fields should I join?", you ask.

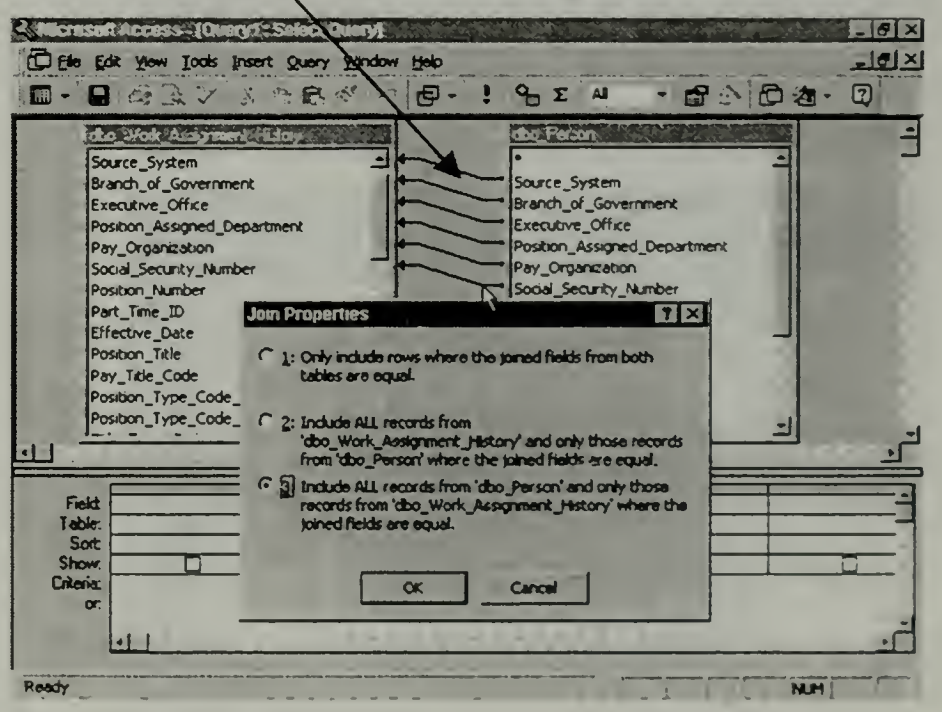
Excellent question. As a rule, you'll want to join on **all fields that a pair of tables has in common.**

(Although you may be using several tables in your query, each join line connects one pair of tables.)

If you don't join on common fields... you may end up with duplicate records.







⑥ Creating your Joins

Joins are relationships between two tables that exist only inside the query environment. Joins allow you to produce results that the database may prohibit.

To create any of the three basic types of joins follow these steps:

1. Place all the tables in the query that you want to take information from.

2. Highlight one of the fields that is to be part of the join.
   (Generally, joins are from left to right)

3. By holding down the left mouse button, drag the changed pointer to the related field in the related table.

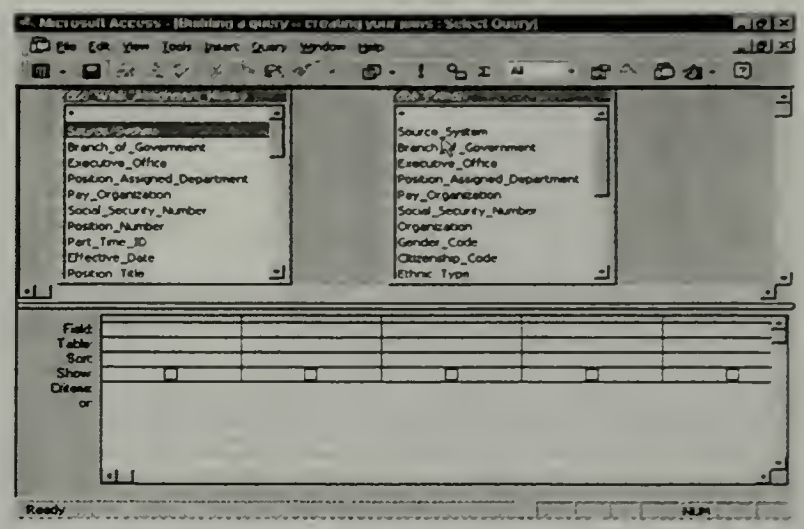
4. Release the left mouse button when you are over the field. A temporary join will be made.
   (By default an inner join is created)

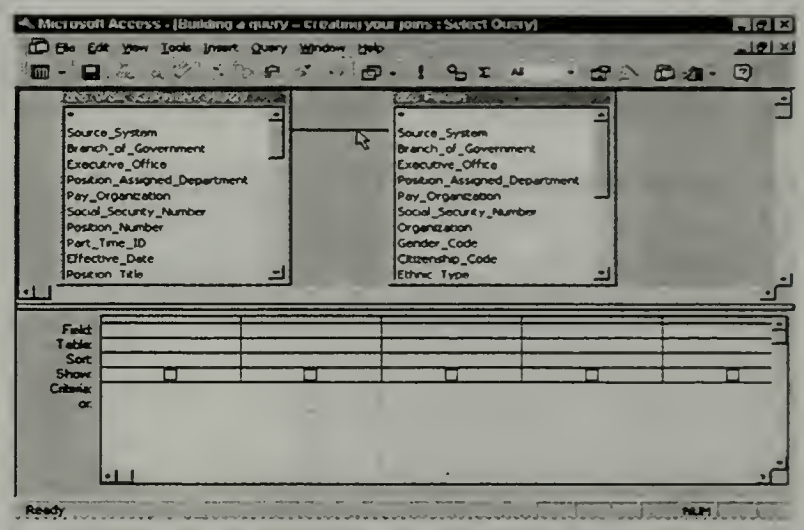
5. To alter the type of join between the tables, highlight the join with your mouse pointer. The join should become slightly thicker.

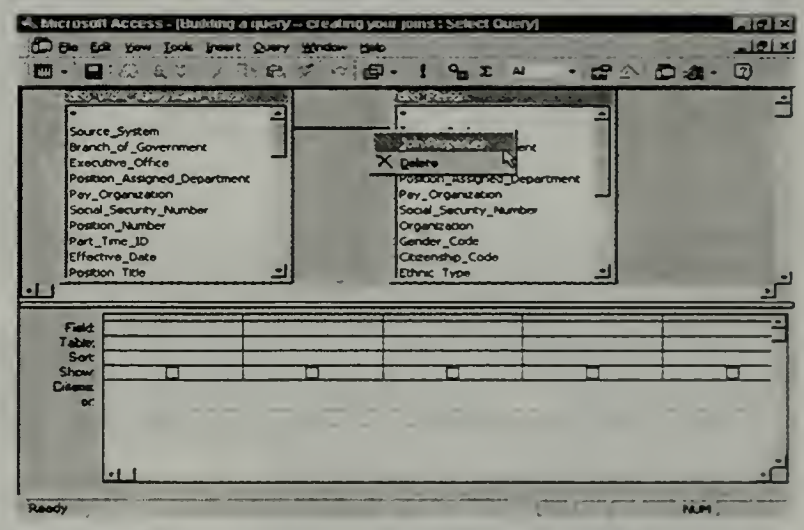
6. Hold down the right mouse button and select Join Properties from the dialog box.

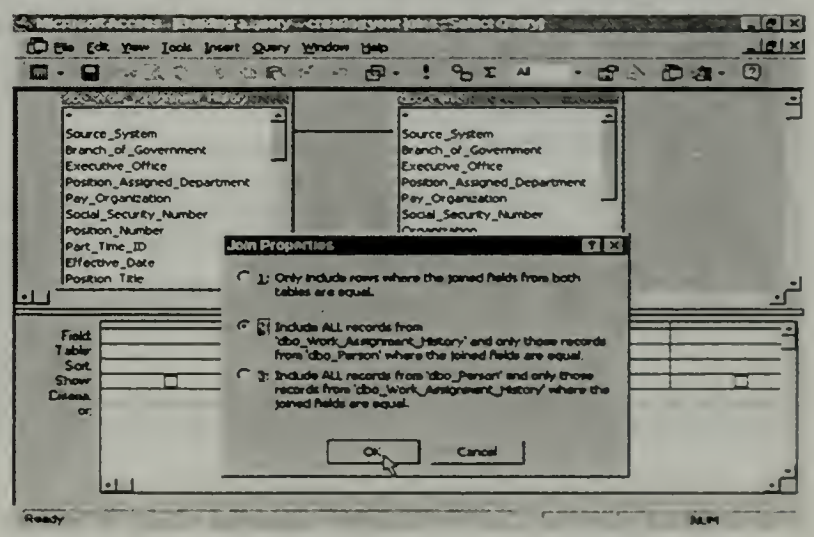
7. Select the type of join that you want to appear between the two tables.

8. Click "OK".









⑦ Refine your Query

We must set criteris for the fields that we have chosen. If we were to "Run" this query now, we would find all the employees in the Commonwealth.

❖ Pay_Period_End_Date

There must be a date in this field. All pay period end dates are the last Saturday of the work-week.

❖ Position_Type_Code_2

Summary tables are always queried for the standard workforce.

Regular position = regu
Excess quota positions = exqu
Backfill positions = ls18

❖ Work_Status_Code

Summary tables are always queried for the standard workforce.

Currently working = W
On paid leave = P
Unknown work status = U

❖ Position_Assigned_Department

Even if you have Multi-department or Statewide View of the tables, we suggest that you narrow your search to a particular department.

Note: If you are searching for information from the past, you must remember that the three-letter MMARS code has changed.

HRD formerly DPA.
ITD formerly MIS.

❖ Total_Employee_Count

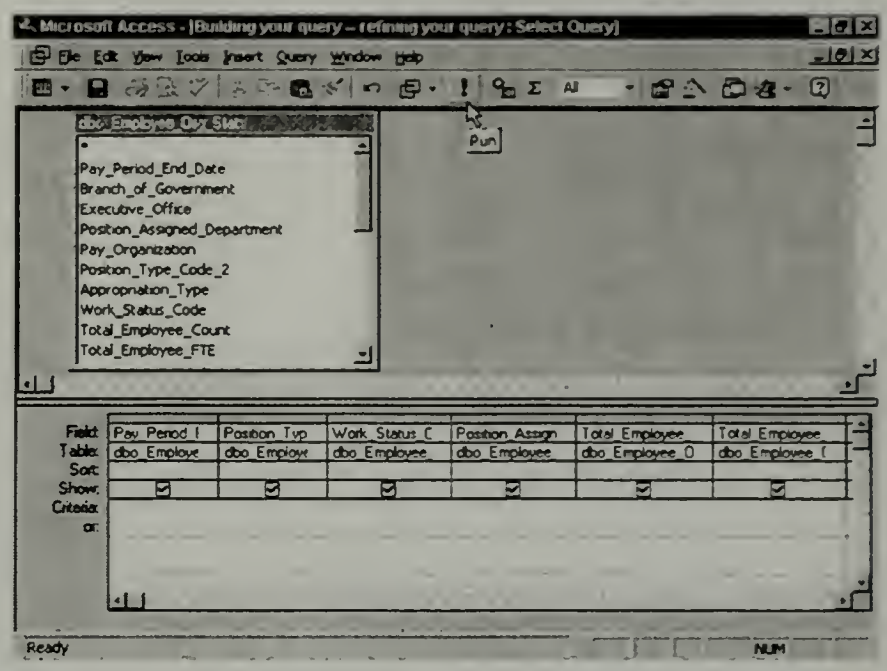
Because we want to know the total count of employees in the department we must SUM this column for a total numeric value.

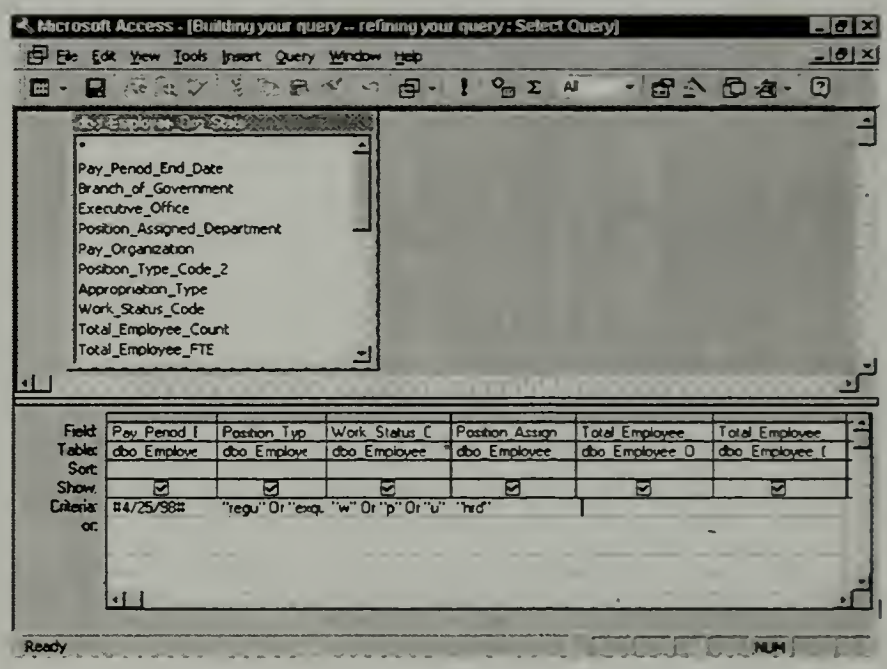
Note: If we do not SUM on this column we will get only the results for individuals that work in the department.

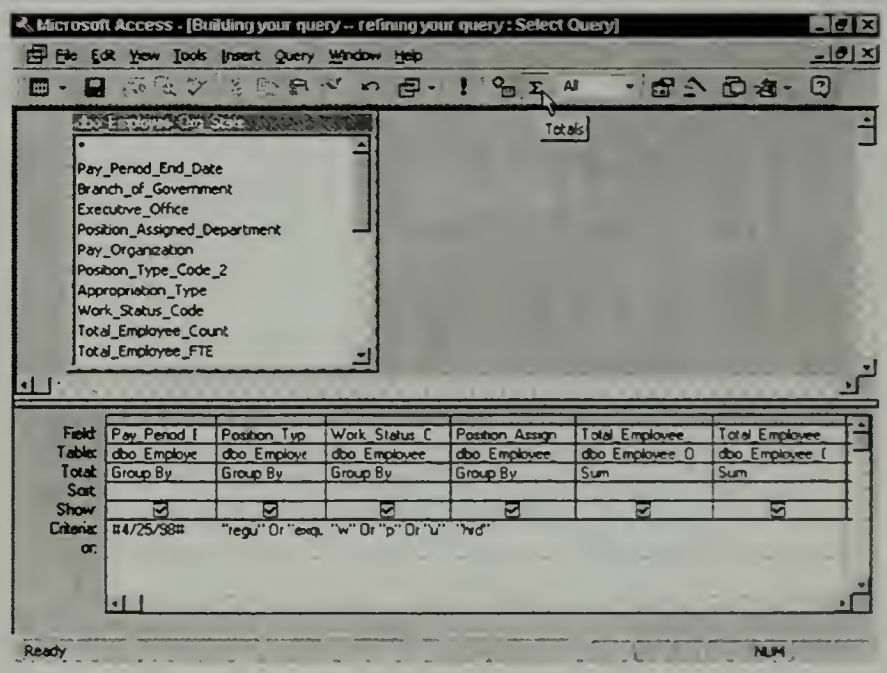
❖ Total_Employee_FTE

Because we want to know the total FTE count of employees in the department, we must SUM this column for a total numeric value.

Note: If we do not SUM on this column we will get results for individual FTE counts in the department.







We Can Now Run This Query!!

⑧ Run your query

Now that you've formulated a question, picked tables, selected fields, set criteria, and decided how you'd like your data organized, you're ready to run your query.

Most properly structured, non-statewide queries will return results quickly.

Response time can be affected by:

- ❖ The size of table(s) you've selected for your query.
- ❖ Joins you've created in your query.
- ❖ Sorting or calculations you've used in your query.
- ❖ How many users are in the Warehouse or specific table(s).
- ❖ Ongoing maintenance of the Warehouse tables or server.
- ❖ Local Area Network (LAN) traffic... etc.

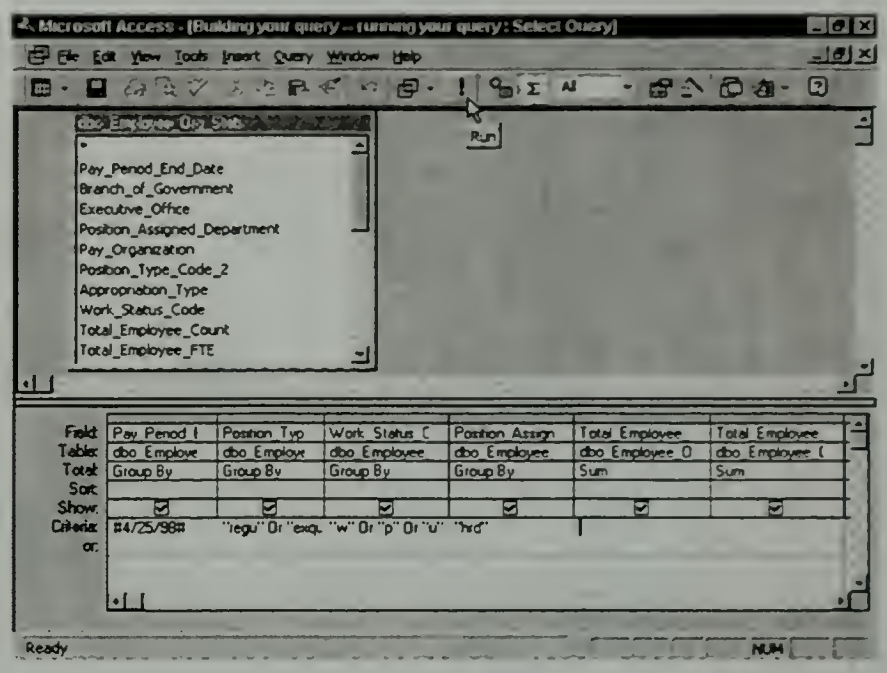
Large queries may take over an hour to run.

However, if a query seems to be taking an unreasonable amount of time, it may be a "runaway".

Runaway queries can be caused by errors in query design or lack of specific criteria. If you experience a runaway query, it will need to be canceled. To cancel a query running on your PC, consult the user manual for your particular query tool.

If your software tool does not allow queries to be canceled, or, if a query is canceled by rebooting your computer, call Commonhelp at 800-335-4702. The Helpline staff will notify Warehouse operations and ensure the query is canceled on the Warehouse server.

Remember, rebooting your computer will NOT cancel the query on the Warehouse server!



Understanding Query Operators & Summary Calculations

Understanding Query Operators

expression

Any combination of operators, constants, literal values, functions, and names of fields, controls, and properties that evaluates to a single value. You can use expressions as settings for many properties and action arguments, to set criteria or define calculated fields in queries, and to set conditions in macros. You also use expressions in Visual Basic.

Comparison Operators

OPERATOR	MEANING	EXAMPLE	INTERPRETATION
=	Equals	=France	Same as France
>	Greater than	>123	Greater than 123
<	Less than	<P	Before P, alphabetically
>=	Greater than or equal to	>=12/10/90	On or after December 1, 1990
<=	Less than or equal to	<=122	Equal to 122 or less
<>	Not equal to	<>5/8/85	All dates expect May 8, 1985
Between	Between two values inclusive	Between E and L	All letters between E and L inclusive
In	Including	In (A,B,C)	A or B or C
Is Null	An empty field	Is Null	Records with no entry in the field
Like	Pattern match	Like CS?26	Look for entries of five characters, the first two begin with CS and the last two are 26.

Logical Operators

OPERATOR	MEANING	EXAMPLE	INTERPRETATION
AND	Both are true	>1 and <6	2,3,4, or 5
OR	One or the other is true	1 OR 2	Either 1 or 2
NOT	Not true	Not 1	Anything except 1

Wildcard Operators

OPERATOR	MEANING	EXAMPLE	INTERPRETATION
?	Any character	CN-0?	Returns all entries that begin with CN-0 and are 4 characters long.
*	Any characters	CN-0*	Returns all entries that begin with CN-0 and are any length long.
[...]	Some other field	=[age]	Results in the QBE grid records that have the same value in this field as in the age field.

Criteria are restrictions you place on a query or an advanced filter to identify the specific records you want to work with. For example, instead of viewing all the suppliers that your company uses, you can view just suppliers from France. To do this, you specify criteria that limits the results to records whose Country field is "France".

To specify criteria for a field in the design grid, enter an expression in the Criteria cell for that field. The expression in the preceding example would be "France". You can use more complicated expressions, however, such as "Between 1000 And 5000". If your query includes linked tables, the values you specify in criteria on fields from the linked tables are case-sensitive ¾ they must match the case of the values in the underlying table.

You can enter additional criteria for the same field or different fields. When you type . expressions in more than one Criteria cell, Microsoft Access combines them using either the And or the Or operator. If the expressions are in different cells in the same row, Microsoft Access uses the And operator, which means only the records that meet the criteria in all the cells will be returned. If the expressions are in different rows of the design grid, Microsoft Access uses the Or operator, which means records that meet criteria in any of the cells will be returned.

Summary Calculations

calculated field

A field defined in a query that displays the result of an expression rather than stored data. The value is recalculated each time a value in the expression changes. A *calculated control* is a control on a form or report that displays the result of an expression rather than stored data.

Select	To find the	Use with these field data types
Sum	Total of the values in a field.	Number, Date/Time, Currency, and AutoNumber
Avg	Average of the values in a field.	Number, Date/Time, Currency, and AutoNumber
Min	Lowest value in a field.	Text, Number, Date/Time, Currency, and AutoNumber
Max	Highest value in a field.	Text, Number, Date/Time, Currency, and AutoNumber
Count	Number of values in a field, not counting Null (blank) values.	Text, Memo, Number, Date/Time, Currency, AutoNumber, Yes/No, and OLE Object
StDev	Standard deviation of the values in a field.	Number, Date/Time, Currency, and AutoNumber
Var	Variance of the values in a field.	Number, Date/Time, Currency, and AutoNumber

Select	To
Group By	Define the groups you want to perform the calculations for. For example, to show total sales by category, select Group By for the CategoryName field.
Expression	Create a calculated field that includes an aggregate function in its expression. Usually, you create a calculated field when you want to use multiple functions in an expression.
Where	Specify criteria for a field you aren't using to define groupings. If you select this option for a field, Microsoft Access will hide the field in the query results by clearing the Show check box.

Perform calculations in a query

You perform calculations in a query using:

- Predefined calculations, called "totals," to compute the following amounts for groups of records or for all the records combined in the query: sum, average, count, minimum, maximum, standard deviation, or variance.
- A custom calculation to perform numeric, date, and text calculations on each record using data from one or more fields. You need to create a new calculated field directly in the design grid for these types of calculations.

Instead of displaying a calculation's results, you can use them:

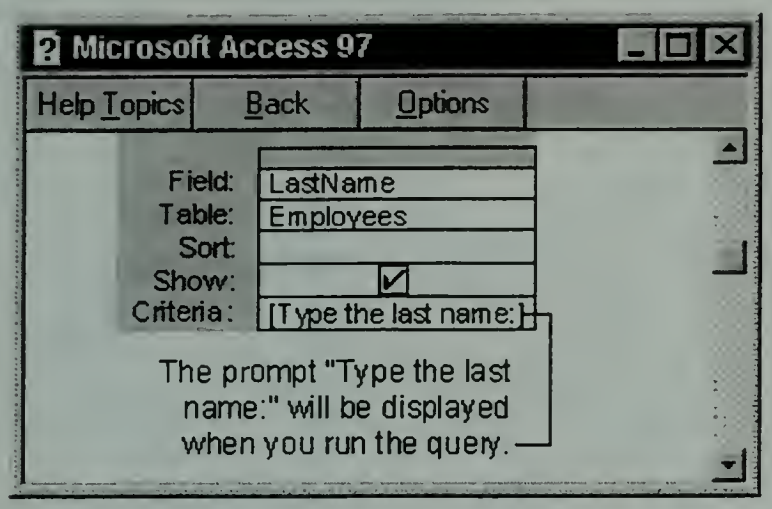
- As criteria to determine the records the query selects or to determine which records to perform an action on.
- To update data from an update query.

Nine of the 12 options in the query design grid's Total row are aggregate functions. All but the First and Last functions are explained in the following table. The other three options in the list are explained in the second table.

Note The aggregate functions won't include records containing blank (Null) values in their calculations. For example, the Count function returns a count of all the records without Null values. There is a way to count Null values, and you can convert Null values to zeroes so they are included in a calculation.

Creating a Parameter Query using Access

Create a parameter query that prompts for criteria each time it's run



A parameter query displays one or more predefined dialog boxes that prompt you for the parameter value (criteria). You can also create a custom dialog box that prompts for the query's parameters.

1. Create a select or crosstab query.

2. In query Design view, drag the fields from the field list to the query design grid.

3. In the Criteria cell for each field you want to use as a parameter, type a prompt enclosed in square brackets. Microsoft Access will display this prompt when the query is run. The text of the prompt must be different from the field name, although it can include the field name.

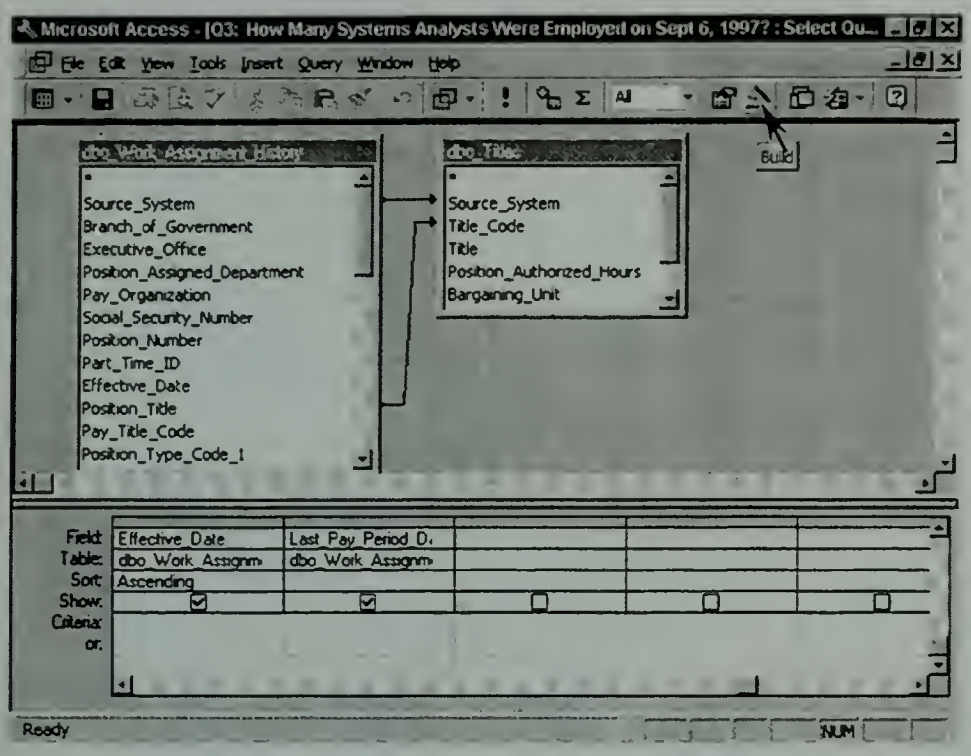
   For a field that displays dates, you can display the prompts "Type the beginning date:" and "Type the ending date:" to specify a range of values. In the field's Criteria cell, type Between [Type the beginning date:] And [Type the ending date:].

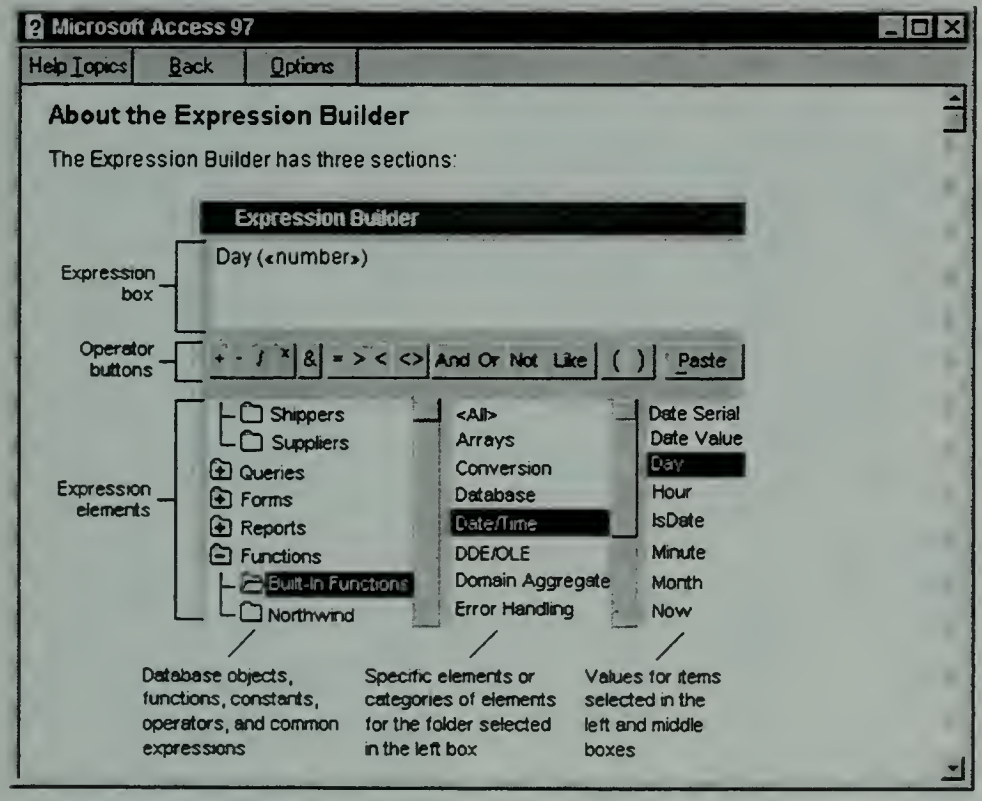
4. To view the results, click the View button on the toolbar, and then type a value for the parameter. To return to query Design view, click the View button on the toolbar again.

Notes: You must specify a data type for parameters in a crosstab query or in a parameter query that a crosstab query or chart is based on. In the crosstab query, you must also set the Column Headings property. In other parameter queries, specify a data type for a field with the Yes/No data type and fields that come from a table in an external SQL database.

Using the Expression Builder in Access

Using the Expression Builder





Start the Expression Builder in a property sheet or the Macro window

1. Click the property or argument box that will contain the expression.

2. Click the **Build** button next to the property or argument box.

3. If a property has more than one builder associated with it, Microsoft Access displays the Choose Builder dialog box. Click Expression Builder and click OK.

Note: If the property box or argument box where you start the Expression Builder already contains a value, that value is automatically copied into the expression box.

4. In the lower-left box of the Expression Builder, double-click or click the folder containing the element you want.

5. In the lower-middle folder, double-click an element to paste it into the expression box, or click a category of elements.

6. If you select a category in the lower-middle box, values display in the lower-right box. Double-click a value to paste it in the expression box.

Tip: You can also type any part of the expression directly in the expression box.

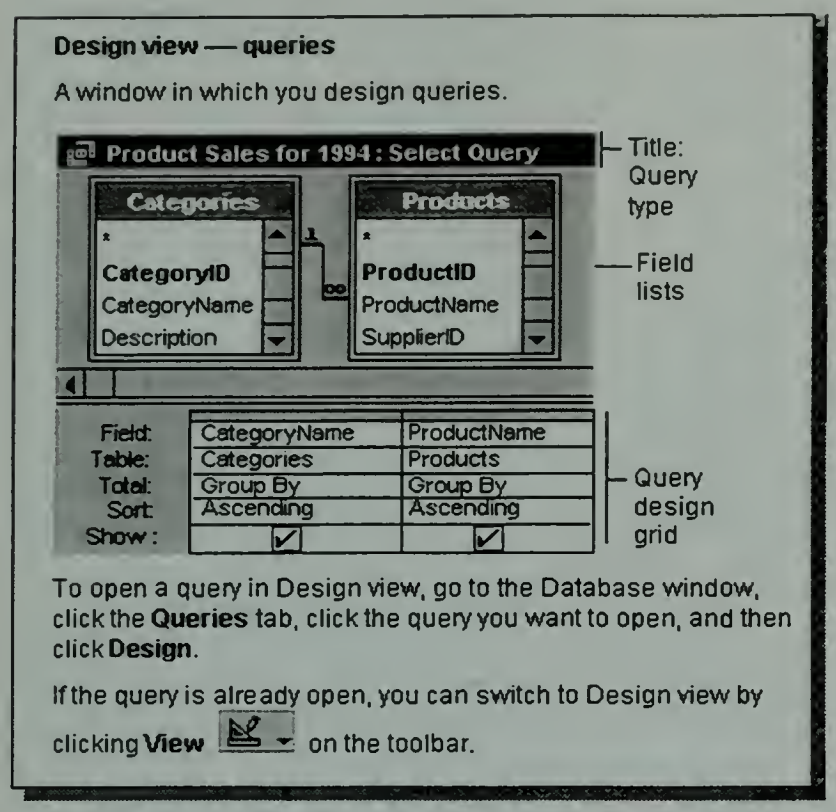
7. Paste any operators you want in the expression by placing the insertion point in the expression box where you want the operator, and clicking one of the operator buttons that are in the middle of the builder.

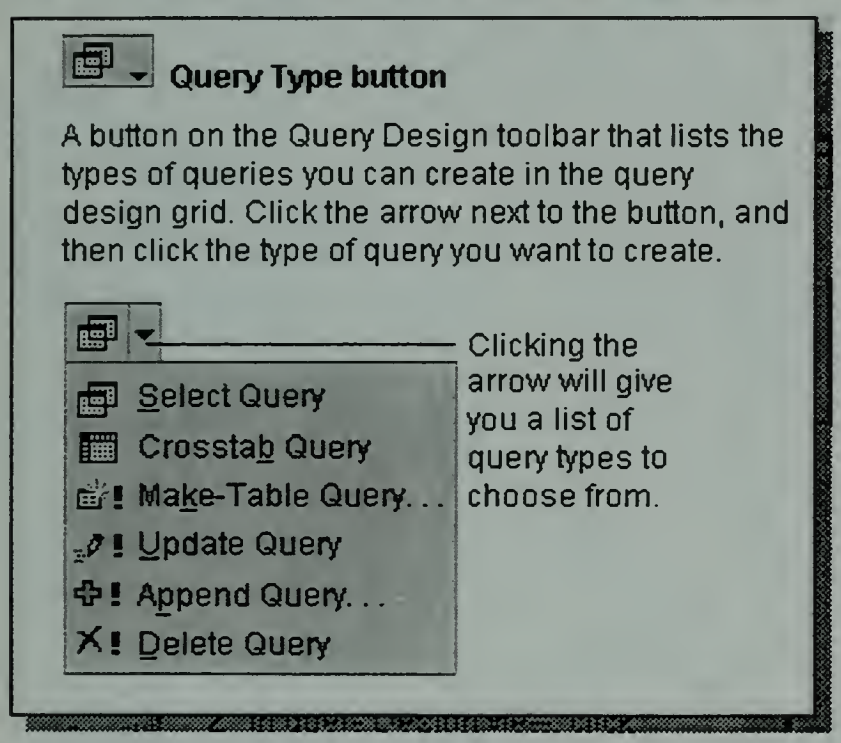
8. When your expression is complete, click OK.

Microsoft Access copies your expression to the location where you started the Expression Builder. If that location already contains a value, or if you started from the Module window with text selected, your new expression replaces the value or text.

Creating a Make Table in Access

Creating a Make Table

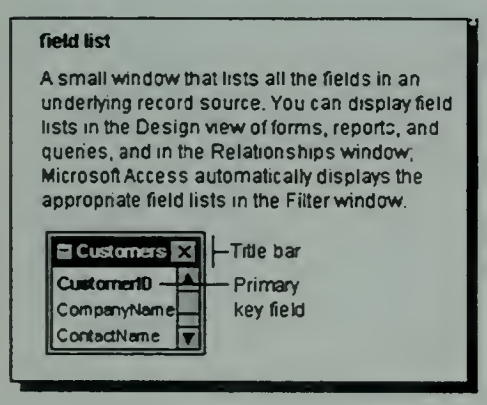


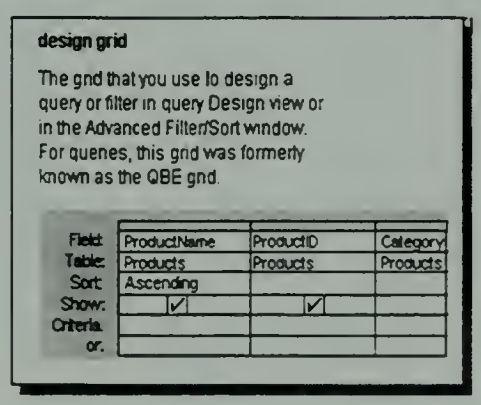


1. Create a query, selecting the tables or queries that contain the records you want to put in the new table.
2. In query Design view, click the arrow next to the Query Type button on the toolbar, and then click **Make Table**. The **Make Table** dialog box appears.
3. In the **Table Name** box, enter the name of the table you want to create or replace.
4. Click **Current Database** to put the new table in the currently open database. Or click **Another Database** and type the name of the database you want to put the new table in. Type the path if necessary.
5. Click **OK**.
6. Drag from the field list to the query design grid the fields you want in the new table.
7. In the **Criteria** cell for the fields that you've dragged to the grid, type the criteria.
8. To preview the new table before you create it, click the View button on the toolbar. To return to query Design view and make changes or run the query, click the View button on the toolbar.
9. To create the new table, click **Run** on the toolbar.

Notes: To stop a query after you start it, press CTRL + BREAK.

The data in the new table you create does not inherit the field properties or the primary key setting from the original table.



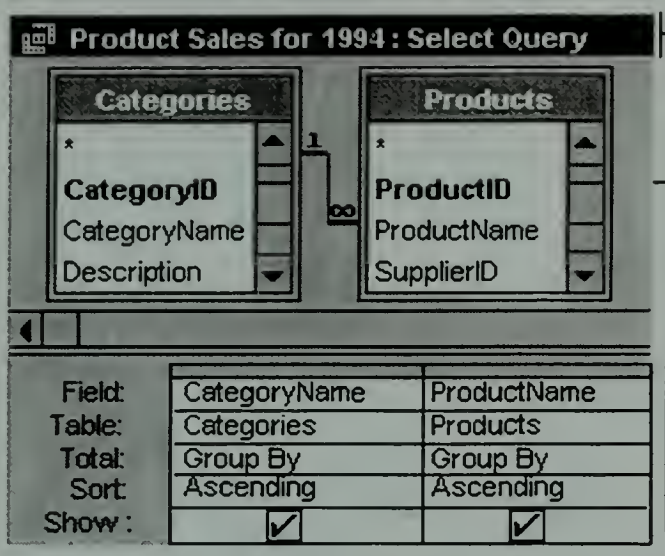


Creating an Append Query in Access

Creating an Append Query

Design view — queries

A window in which you design queries.

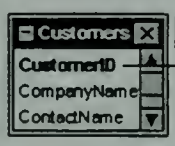


To open a query in Design view, go to the Database window, click the **Queries** tab, click the query you want to open, and then click **Design**.

If the query is already open, you can switch to Design view by clicking **View** on the toolbar.

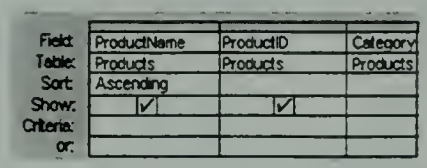
field list

A small window that lists all the fields in an underlying record source. You can display field lists in the Design view of forms, reports, and queries, and in the Relationships window. Microsoft Access automatically displays the appropriate field lists in the Filter window.



design grid

The grid that you use to design a query or filter in query Design view or in the Advanced Filter/Sort window. For queries, this grid was formerly known as the QBE grid



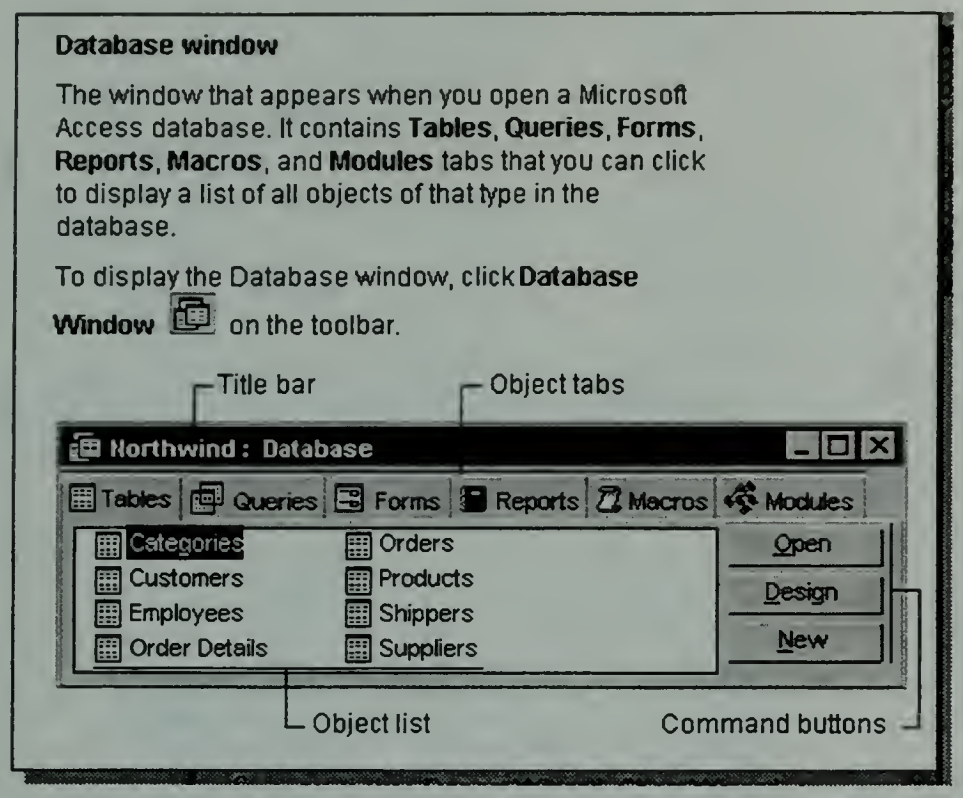
1. Create a query that contains the table whose records you want to append to another table.
2. In query Design view, click the arrow next to **Query Type** on the toolbar, and then click **Append**. The **Append** dialog box appears.
3. In the **Table Name** box, enter the name of the table you want to append records to.
4. Click **Current Database** if the table is in the currently open database. Or click **Another Database** and type the name of the database where the table is stored. Type the path if necessary.
5. Click **OK**.
6. Drag from the field list to the query design grid the fields you want to append and any fields you want to use for setting criteria. Also, you may or may not want to add the primary key field if it has an AutoNumber data type.

   If all the fields in both tables have the same names, you can just drag the asterisk (*) to the query design grid. However, if you're working in a database replica, you'll need to add all the fields instead.
7. If the fields you've selected have the same name in both tables, Microsoft Access automatically fills the matching name in the **Append To** row. If the fields in the two tables don't have the same name, in the **Append To** row, enter the names of the fields in the table you're appending to.
8. In the **Criteria** cell for the fields that you have dragged to the grid, type the criteria on which additions will be made.
9. To preview the records that the query will append, click **View** on the toolbar. To return to query Design view, click **View** on the toolbar again. Make any changes you want in Design view.
10. Click **Run** on the toolbar to add the records.

Note: To stop a query after you start it, press CTRL + BREAK.

Creating a Report with the Report Wizard in Access

Creating a Report with the Wizard

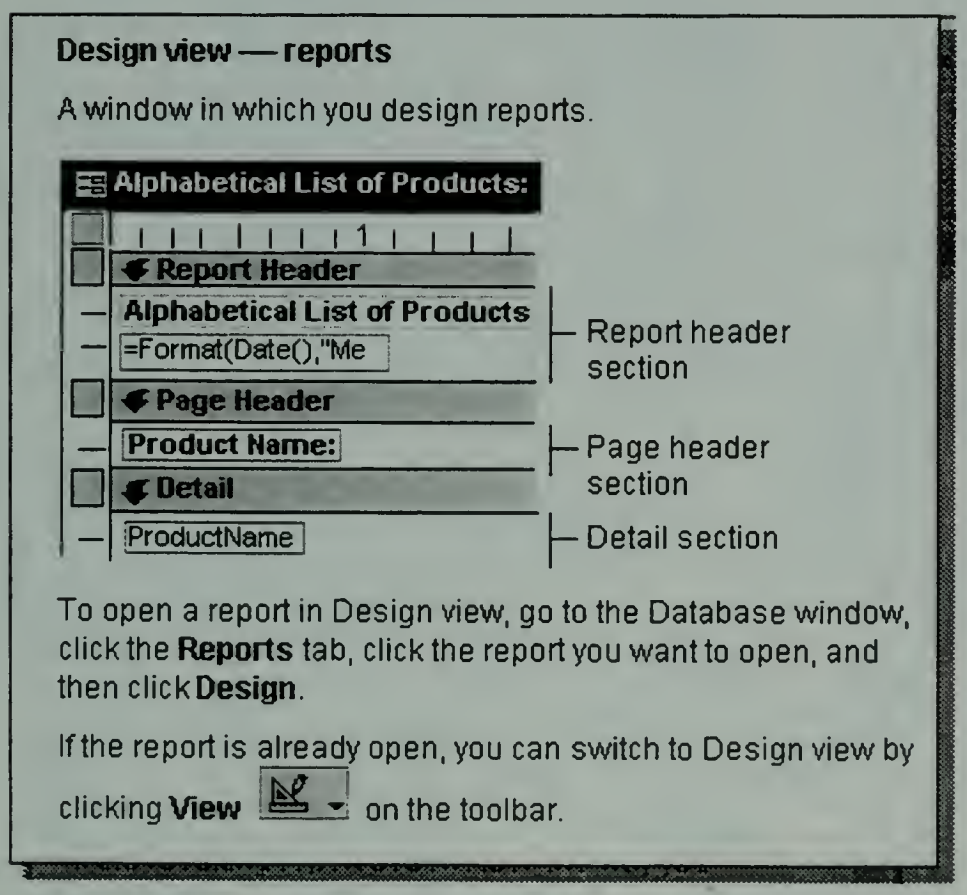


1. In the Database window, click the **Reports** tab.
2. Click **New**.
3. In the **New Report** dialog box, click the wizard that you want to use. A description of the wizard appears in the left side of the dialog box.
4. Click the table or query that contains the data you want to base your report on.

Note: Microsoft Access uses this table or query as the default record source for the report. However, you can change the record source in the wizard and select fields from other tables and queries.

5. Click **OK**.
6. If you clicked **Report Wizard**, **Chart Wizard**, or **Label Wizard** in step 3, follow the directions in the wizard dialog boxes. If you click **AutoReport: Tabular** or **AutoReport: Columnar**, Microsoft Access automatically creates your report.

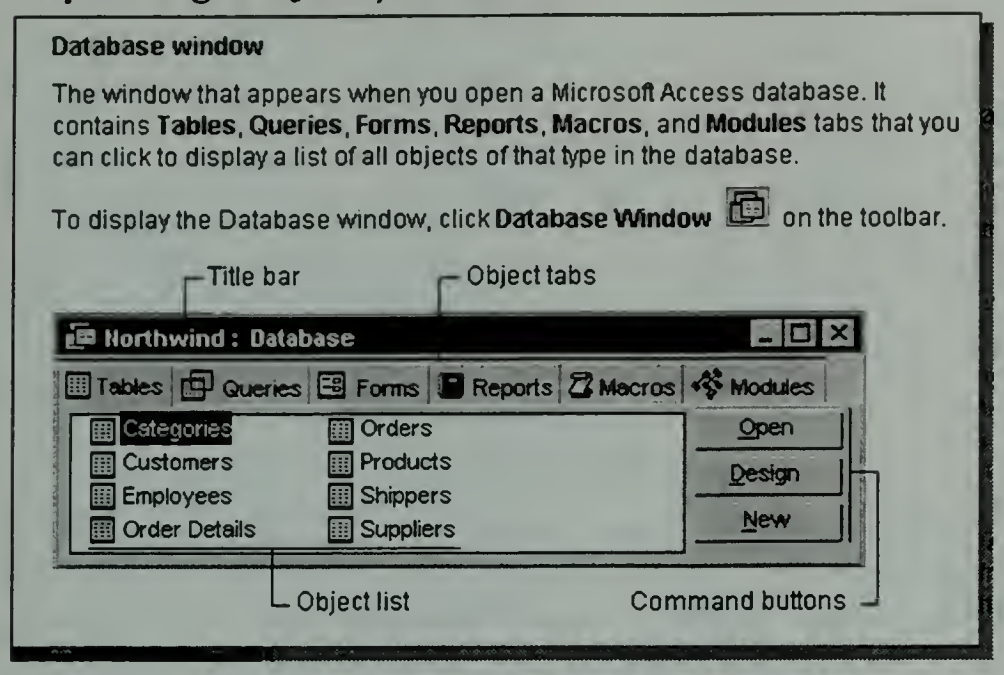
   - **AutoReport: Columnar.** Each field appears on a separate line with a label to its left.
   - **AutoReport: Tabular.** The fields in each record appear on one line, and the labels print once at the top of each page.

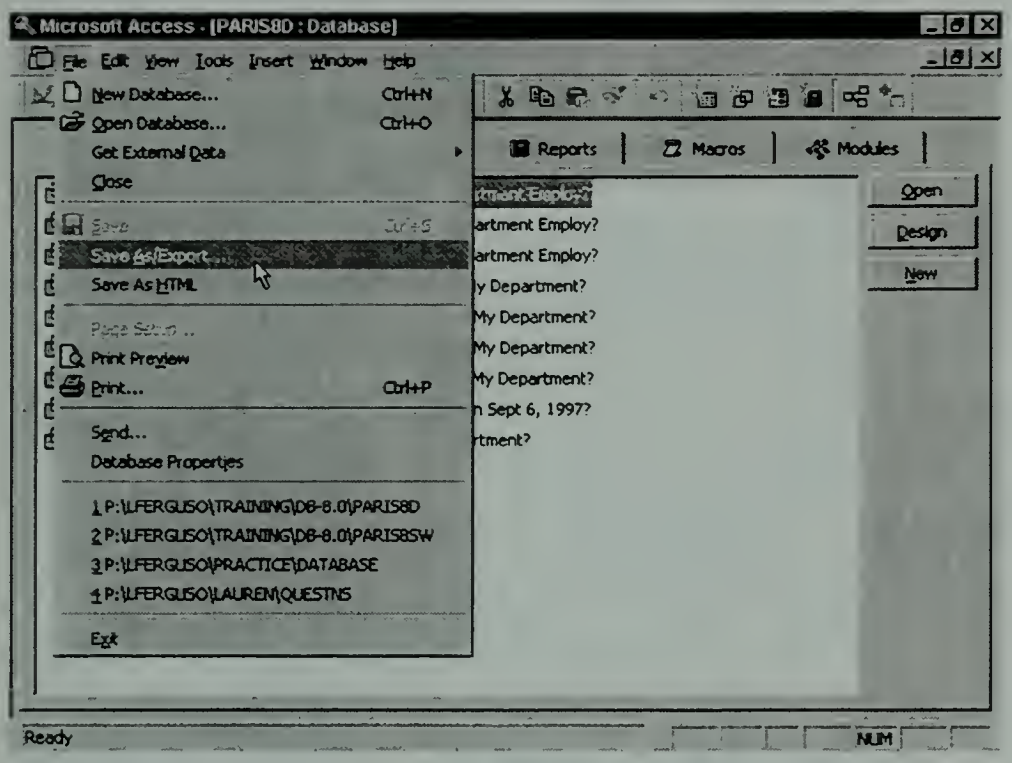


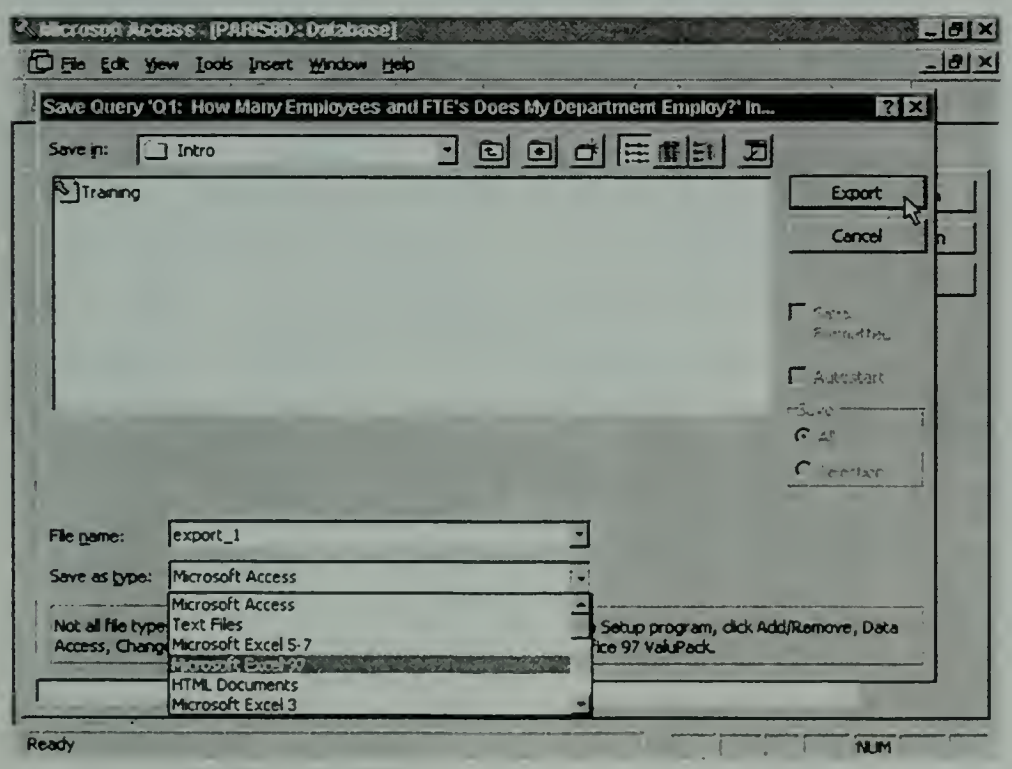
If the resulting report doesn't look the way you want it to, you can change it in Design View.

Exporting a Query Results from Access to Excel

Exporting a Query to Excel







1. In the Database window, click the name of the table or query you want to export, and then on the **File** menu, click **Save As/Export**.

2. In the **Save As** dialog box, click **To An External File Or Database**, and then click **OK**.

3. In the **Save As Type** box, click the spreadsheet format you want.

4. Click the arrow to the right of the **Save In** box and select the drive or folder to export to.

5. Double-click an existing spreadsheet, or enter a new name in the **File Name** box.

Caution: With three exceptions, if you export to an existing spreadsheet file, Microsoft Access deletes and replaces the data in that spreadsheet. The exceptions occur when you export to a Microsoft Excel version 5.0, 7.0/95, or 8.0/97 workbook, where the data is copied to the next available worksheet.

If you selected **Microsoft Excel 5-7** or **Microsoft Excel 97** in step 3 and you want to preserve fonts, preserve the displayed data from Lookup fields, and preserve field widths, select the Save Formatted check box. Saving will be slower.

6. Click **Export**.

Microsoft Access creates the spreadsheet file containing the data from your table or query. Field names from the table or query are placed in the first row of the spreadsheet.

Using Excel 5.0 (Office '95) in the Information Warehouse

Using Excel 5.0 to access the Warehouse

ACCESSING THE WAREHOUSE

Locate the Microsoft Excel Icon on the Desktop, or from the Program Manager.

Click left mouse button, once on the Microsoft Excel Icon.

This opens Microsoft Excel 5.0 with Window titled: **Microsoft Excel - Book 1**

Click on <Data> to view the drop down menu

Click on <Get External Data>

The status bar in the lower left-hand corner of your screen flashes the message:

Opening XL Query.XLA

Note the new Title Window, **Microsoft Query.** There is also an active Pop-Up window the user to:

Select Data Source

Click <OTHER>

This leads to a new Pop-Up window called:

ODBC Data Sources
Enter Data Source

From the drop down menu of Data Sources,

Click on <att>,

to Highlight it in the selection box, then;

Click on <OK>

Another Pop Up window entitled.

SQL Server Login

appears. It identifies the Data Source as, **att**.

At the **Login ID:** field,

Type in <your uaid>,

At the **Password:** field,

Type in <your password>

This leads to a window titled, **Select Data Source**. It lists the available data sources.

Click on <ATT>, then

Click on <USE>.

ADD TABLES

The active table showing has a title bar of **ADD TABLES.** There is a listing of all table choices within the selected Database. The scroll bar will bring you through the list.

The bottom panel displays the database.

Scroll to the table that you need to run your query.

Click on it

Click on <ADD> button.

This causes the display window of the table you have choosen to appear in the top half of the Microsoft Query window panel. (Repeat the **highlight** and **ADD** steps for each additional table you need to answer a specific query.)

Once all needed tables have been selected,

Click on the <CLOSE> button.

The active window defaults to the title, Query 1 with your table(s) displayed.

Make your displayed table wide enough to read by moving the mouse arrow on the right hand border of the table(s). Hold the left mouse button down when the double arrow, (<->), symbol is displayed. Move the mouse to the right with the left mouse button depressed, to widen the window. This will help in reading the selection choices in the table.

SELECT DATA ELEMENTS (COLUMNS)

Notice the toolbar beneath the Menu commands. It has defaulted to a highlighted Automatic query, (!). It automatically reruns the query whenever a change is made as you build it.

Click once on Automatic Query button to disable it.

Move your cursor to highlight selected data elements you wish to display in your report/query. (The data elements listed in your handout for query 1)

Scroll through your table(s) to find the data elements/column titles that should be displayed on the query/report. Once you locate a data element,

Double Click on the data element to place it as a column heading.

OR

Highlight and hold the cursor down on it.

With the left mouse button depressed, drag the data element to its position in the column title area below.

Drop it in place by lifting your finger off the left mouse button.

Repeat the steps listed above until all data elements have been selected for your query/report.

ADD CRITERIA

After all Data Elements have been selected,

Click on <View>, on the tool bar at the top of the screen.

A drop down menu will appear.

Click on <Criteria>.

A check mark will appear beside it and a Criteria panel will appear above your displayed Data Elements. It is here that you place limitations on the data in the columns you have selected.

Click on your first table choice, click on the data element that your want to limit in tne table.

Drag and Drop it into the first box in the Criteria panel.

Double Click in the VALUE field directly below the Criteria listed.

This will lead you to an **Edit Criteria** box. Notice the **field** listed is the table chosen, which was above the value field you double clicked in. The **operator** field has a default operator of **equal** listed.

Click the down arrow beside the operator to see a complete list of all operators available.

Equals, is the correct operator for our value so,

Click to highlight <equals>.

Now we need to set our specific value.

Click in the Values field and type in your criteria for the data element you want your query to cover.

Look at the additional Criteria/Values listed in your query. Repeat the steps listed above until all the Criteria and the corresponding values are listed.

Your query building is complete. Scroll left/right and notice that you have specified table(s), displayed column headings for data elements which will answer your question and focussed on specific criteria field values, which structures a limited response from the PARIS database on the SQL server.

SELECT RECORDS/QUERY NOW

You are now ready to run your query.

Click on the exclamation point button (!), to Query Now.

The Information Warehouse has been asked for specific information and returned you query results in the bottom panel beneath the field names you specified. View the data by scrolling with the arrows.

RETURN DATA TO MICROSOFT EXCEL

If this query returned data you expected,

Click on <FILE>, on the toolbar, and highlight/select Return data to Microsoft excel.

The Microsoft Excel Book 1 spreadsheet appears with a pop-up window entitled:

GET External Data

Specify with an **"X"**, by clicking button with mouse, to:

Keep Query Definitions, and
Include field names.

You may also include row numbers if you choose, but it is not necessary.

Using Excel '97 (Office '97) in the Information Warehouse

Using Excel 97 to access the Warehouse

ACCESSING THE WAREHOUSE

Locate the Microsoft Excel Icon on the Desktop, or from the Program Manager.
Click left mouse button, once on the Microsoft Excel Icon.

This opens Microsoft Excel 5.0 with Window titled: **Microsoft Excel - Book 1**
Click on <Data> to view the drop down menu.

Click on <Get External Data>.

Click on <Create New Query>.

Note the new Title Window, **Choose Data Source.**
Select **Data Source: Warehouse_Prod**

Click **<OK>**

This leads to a new Pop-Up window called:
SQL Server Login

At the **Login ID:** field,
Type in <your uaid>,

At the **Password:** field,
Type in <your password>

Press <OK>.

SELECT DATA ELEMENTS (COLUMNS)

This leads to a window titled, **Query Wizard – Choose Columns.**

The active table showing has a title bar of Query Wizard – Choose Columns. There is a listing of all tables choices within the selected Database. The scroll bar will bring you through the list.

Once you have found the table that you need, click on the **Plus (+)** sign to expand the table to show the fields.

Scroll through the table to find the data_elements/column titles you wish to display in your query.

Once you locate the data element,
Double click on the data element to place it as a column heading; **OR**
Hit **<Enter>**; **OR**

Click once, then click the **Greater than** (>) symbol located in the middle of the screen.

Repeat the steps listed above until all data elements have been selected for your query.

ADD CRITERIA

After all Data Elements have been selected,

Click the <Next> button.

This takes you to the **Query Wizard –Filter Data** screen.

This screen will list all the data elements that you choose. It is here that you can set specific criteria on the various data elements.

To set criteria on a data element,
Notice the field listed, the first data element is the one that you chose.

Click on it, and the area to the right will become active for use.
Under **"only include rows where:"** appears, click on the drop down arrow.

A list will appear for valid options that you can choose from:
Highlight **<Equals>**.

Now you need to set your specific value,
Click inside the blank box and type your criteria.

Repeat the steps listed above until all the Criteria/Values are set for your query.

Note: The operator "is one of" is not located in the Query Wizard. It is only found in the query design panel under Edit Criteria.

After all criteria has been set,
Click the **<Next>** button.

SORT RECORDS

You are now ready to sort your query. It is here that you can have your query sorted in a particular way.
Click the drop down arrow under **Sort by.**

Select your **sort by** field and have the query sorted in Ascending or Descending order.
Click the **<Next>** button.

FINISHING QUERY

You are now at the Query Wizard – Finish .

Click the **Save Query** button. It is very important that you save your query before you run it.

Remember to name it something appropriate so that when you return to it later, you will know what it is.

Once you save your query, Excel will return you to the **Query Wizard –Finish** screen.

It is here where you want to,

Click the radio button labeled, **View data or edit query in Microsoft Query**.

Click the finish button and your query will run automatically.

RETURN DATA TO MICROSOFT EXCEL

If this query returned data you expected,

Click on <FILE>, on the toolbar, and highlight/select Return data to Microsoft excel.

The Microsoft Excel Book 1 spreadsheet appears with a pop-up window entitled:

Returning External Data to Microsoft Excel

Click **<OK>**

This returns the data to a Microsoft Excel Worksheet.

Glossary of Key Terms for HR Data in the Information Warehouse

GLOSSARY OF KEY TERMS

Listed below are the key terms, which will be used in HR Data and are important to the users' ability to define and/or interpret data. These terms are described for use in HR Data specifically.

ACCOUNT TYPE

The categorization of eight-digit account numbers into logical groupings based on the fund to which the account relates. For HR Data, this is equivalent to the '**Appropriation Type Code**' found on MARRS.

	Account Type	
Budgetary	01	Operating Budgetary Accounts
Non-Budgetary	02	Bond Accounts authorized by Capital Budgets
	03	Trust and other non-governmental, non-appropriated accounts
	04	Federal grant accounts and Intragovemmental Service Fund accounts
	00	Accounts which are not registered in MMARS default into this category and unless listed as 00, are counted in the 03 Trust/Other Account Type.

AGE RANGE

Where used with HR Data, age is calculated from the date of birth to the most recent ending date of period prior to the report's requested date.

Age Ranges in PARIS are:

< 20
20-29
30-39
40-49
50-54
55-59
60-64
65-69
> =70
Unknown

Employees without a date of birth in the source system will be listed as Unknown.

AVERAGE SALARY See Mean Annual Salary per FTE under Salary.

BRANCH OF STATE GOVERNMENT

Branches of Government with HR Data can be summarized into the following groupings:

LEG Legislative Branch including all Legislative staff members but not elected Representatives and Senators.

JUD Judicial Branch including all Trial, Appeals, and Supreme Judicial Court employees, including Judges.

EXE Executive Branch including- all state-wide Constitutional offices such as the Governor, Secretary of State, and Treasurer, as well as the District Attorneys and others.

The Executive Branch can be further divided in PARIS to retrieve information in more detail:

EX1 Composed of the departments within the executive Branch that report to the Governor.

EX2 Composed of departments that are independent of the Governor. These include the Constitutional Offices with the exception of the Governor's Office, and certain independent offices where the department head is not appointed by the Governor.

EX3 Composed of the executive departments that report to the Governor (EX1) minus Higher Education.

(EX3 = EXI - Higher Education)

Note: the HR Data does not include Independent Authorities.

BUDGETARY FUNDS

All accounts categorized as "01" Account type. These accounts are included in the General Appropriation Act and are referred to as "the operating budget".

COMMONWEALTH

The Commonwealth includes three branches of government: Legislative, Judicial and Executive.

DEPARTMENT

A legal entity of state government established by the Legislature with a specific mission. The departments in HR Data reference the MMARS Department Table and are identified by a 3 position alpha code.

DEPARTMENT/PAYORG

The combination of the Department Code and Payroll Organization Code that identifies a specific department's payroll. A department may have one or more Department / Payorg(s).

DEPARTMENT START DATE

The date that appears in the source system as the Start Date in the current department.

EMPLOYEE

An individual who is associated with a position and is eligible to receive compensation from the AA subsidiary or in the case of the 00 subsidiary, Object Codes A01 through A16.

ENDING DATE OF PERIOD

This date is the last day of a payroll period and is always a Saturday; every Saturday for PMIS and the last Saturday of the month for CAPS and HRMIS.

FULL TIME EQUIVALENT (FTE)

For HR Data, FTE is defined in terms of a specific work assignment.

Full-time (FT) – Work assignments whose FTE value = 1.0.
Part-time (PT) – Work assignments whose FTE value = 0.50 to 0.99.
Less than half-time (LT) – Work assignments whose FTE value = 0.01 to 0.49.

GENDER where used with HR Data, Gender is as follows:

F for Female
M for Male
U for Unknown

HR Data allows for this field to be unknown if the source system Does not record the data

JOB GRADE (JOB)

A salary range on a salary schedule or chart to which titles that are sufficiently comparable in value in regard to duties and responsibilities are assigned through collective bargaining negotiations and/or job evaluation. With HR Data, the Job Grade is determined by the first two digits of the Pay Title code as provided by the source system.

LAST PAYROLL ACTIVITY DATE

Last Payroll Activity Date indicates the last date on which a work assignment was recorded for an employee.

NON-BUDGETARY FUNDS

All accounts categorized as '02', '03', or '04': In PARIS, Account Type 00 is included with non-budgetary funds.

ORGANIZATIONAL HIERARCHY

The order of organizational units for HR Data. Organizational unit is a generic term used in PARIS to indicate any level of the organizational hierarchy; i.e., Commonwealth, branch of government, secretariat, department or dept./pay-org.

PAY TITLE

Title describes the type of work for which an employee is being paid. The Pay Title Code is the 5 position alpha/numeric code for the pay title.

PARIS ID/Person ID

is an internal sequence number assigned by PARIS as a unique identifier for each person.

POSITION

Position is an authorization to hire employees. Position Type reflects the various kind of authorizations to hire.

REGU Regular positions

EXQU Excess Quota positions - similar to regular positions but authorized in excess of Legislative line item position caps, for a defined period of time.

LS18 Positions to backfill when an employee is on extended paid sick leave of absence.

UNKN	Position types for which the source system does not currently Provide information default into this category and unless listed as UNKN, -are counted in the Regular Position Type.
SEAS	Seasonal positions (not to be filled for long-term work)
BORD	Board and Commission positions
PERD	Per Diem positions

SALARY

The weekly dollar amount a person is regularly scheduled to receive within a normal pay cycle when no exceptions have been posted.

HR Data salary includes regularly scheduled adjustments such as shift differential and other special adjustments received by police, health care professionals, and others.

HR Data salary does not include irregular or unscheduled payments such as overtime. Because of this a person's PARIS - salary may differ from the person's actual earnings for that pay cycle.

For the **PMIS** payroll, Salary may include:
Salary Chart Pay (or equivalent pay)
Area Differential
Career Amount
Education Amount
Health Maintenance Pay
Incident Enforcement Pay
Industrial Accident Pay

For the HRMIS payroll, Salary may include:
Base Salary
Extra Amount

For the CAPS payroll, Salary may include EITHER:
Regular Pay OR **Per Diem**

The method used to calculate total annual salaries for an organization is described in the 'Salary Analysis' section of the ***Employee, FTE, Salary Amount*** chapter of the user guide as well as below.

1. The weekly Base (Salary Chart Pay or its equivalent), including cents, for each Work Assignment in the organization is multiplied by 52 to give the annual amount. The annual amount is then rounded to the nearest dollar.

2. For each Work Assignment in the organization, the individual Other amounts are multiplied by 52 to give the annual amount and then rounded to the nearest dollar. These annualized, rounded amounts are then summed.

3. The annual rounded Base (Salary Chart Pay or equivalent) and the annual rounded Other amounts are summed to give the Total salary amount for the organization.

When Salary dollars are displayed in thousands, the rounded dollar amount is divided by 1,000 and rounded to one decimal place.

Mean Annual Salary Per FTE

The "average" salary for a specific group of FTEs. The method used to compute the mean annual salary per FTE is described in the "Salary Analysis" section of ***Employee, FTE, and Salary Amount*** chapter of the user guide as well as below.

1. The total salary amount is computed as described above.

2. If there are any Work Assignments included that have an FTE value equal to zero, the annual base and other amounts for those Work Assignments are subtracted from the total salary amount.

3. The individual FTE values from the source system are truncated. Only the integer portion of the number and the first two decimal places are retained.

4. The truncated FTE values are summed.

5. The adjusted total salary amount is divided by the sum of the truncated FTE values for the organization and rounded to the nearest whole dollar. The result is the mean annual salary per FTE.

SALARY RANGES

The salary figures used in demographic ranges are annualized (weekly salary is multiplied by 52 and then rounded to the nearest dollar). For part-timers, the weekly salary amounts are annualized and then prorated as though the part-timers were working full-time for the entire year.

Salary Ranges are:

- < 20K
- 20 < 25K
- 25 < 30K
- 30 < 35K
- 35 < 40K
- 40 < 50K
- 50 < 60K

60 < 70K
70 < 80K
> = 80K

SALARY REPRESFNTATION UNIT

The group to which the pay titles code is assigned for labor relations and pay purposes. SRU incorporates bargaining units as well as categories for managers and other employees

Note: *In the PMIS population represented by HR Data, a confidential position is counted in the total number for the SRU to which its pay title is assigned, although the employee is not a member of that unit for labor relations purposes.*

SECRETARIAT

HR Data follows the MMARS chart of accounts, including Executive Branch Secretariats as well as additional organizations from the Legislature and the Judiciary in the list of "Secretariats".

SOURCE SYSTEM

The source system is the operational system from which the data has been extracted. Current Source system codes are **P = PMIS, C = CAPS** and **H =HRMIS.**

STANDARD WORFORCE

Standard Workforce includes persons in Regular, Excess quota, LS- 18 and Unknown position types with the following work status codes: W = Working, P = Paid Leave, and U = Unknown. It does not include the "other employees" (seasonal, board/commission members and per diem employees) or persons with work status codes of L = Unpaid leave of Absence and I = Industrial Accident Leave. See Position Type and Work Status Code.

START DATE WITH THE COMMONWEALTH

The date that appears in the source system as the Start Date with Commonwealth (usually considered the first day of employment in state government).

STEP

One of the divisions of a salary range in a job grade or group at which an employee is compensated, given from the source system. If the step isn't listed as a number between 1 and 7, it is displayed as Other/Unknown.

WORK ASSIGNMENT

The relationship between a person and a position associated with an account in a dept/pay-org. If any one of the latter three elements changes, a new work assignment is created.

WORK ASSIGNMENT DISCONTINUE DATE

The effective date associated with the end of the work assignment as recorded by the source system. Prior to 7/l/90, no data exists for this field.

WORK ASSIGNMENT TERMINATION CODE

Indicates the reason, as defined by the source system that the relationship ended between a person and a position paid from an account in a dept/pay-org. Codes differ by source system and may include: layoff (unspecified, voluntary, or involuntary); position movement (promotion, demotion, and intra-departmental transfer); transfer (inter-departmentally); resignation; death; retirement; discharge; or military duty. Prior to 7/l/90, no data exists for this field.

WORK FORCE REPORT (WF)

The Work Force Report reflects changes in work assignment by comparing one period to another based on dates selected. The following are some terms used in the report. The definitions are unique to this report.

Hires

Reflects the number of employees who did not have a work assignment with a work status code of W = Working P = Paid Leave, or U = Unknown at the start date selected but who do have a work assignment, with a work status code of W = Working, P = Leave with Pay, or U = Unknown at the end date selected.

Transfers-In

Reflects the number of employees who, at the end date selected, held a specific work assignment, with a work status code of 'W', 'P' or 'U', in the organizational unit requested and held a different work assignment with a work status code of 'W', 'P', or 'U', at the start date selected. The difference can be a change in organizational unit, account and/or position number.

Terminations

Reflects the number of employees who had a work assignment, with a work status code of 'W', 'P' or 'U', at the start date selected and did not have a work assignment with work status code of 'W', 'P' or 'U', at the end date selected. Some reports may also include people on industrial accident or unpaid leave, or people laid off while on industrial accident or unpaid leave.

Transfers-Out

Reflects the number of employees who, at the start date selected, held a specific work

assignment, with a work status code of 'W', 'P' or 'U', in the organizational unit selected and held a different work assignment with a work status code of 'W', 'P' or 'U', at the end date selected. The difference can be a change in organizational unit, account and/or position number.

WORK STATUS CODE (EMPLOYMENT CATEGORY CODE)

Work Status Codes are as follows:

W	=	Active employee performing work
P	=	Active employee on a paid leave
L	=	Active employee on a leave without pay
I	=	Active employee on industrial accident leave
U	=	Unknown or Not Available status

Work Status can be divided into smaller subgroups, called employment categories. For example, the Industrial Accident (1) work status has several subdivisions such as Injured-in-Line-of Duty (ILD) and Injured-by-Patient-or-Prisoner (IPP).

YEARS OF SERVICE

Years of Service is calculated from the Start Date with Commonwealth to the most recent ending date of period. The Years of Service Ranges are as follows:

<=5
6-10
11-20
21-25
26-30
>=31
Unknown

Employees without a Start Date with Commonwealth in the source system will be listed as Unknown.

Exploring the Data Dictionary in the Information Warehouse

Exploring the Data Dictionary

The Data Dictionary is a guide to assist users of the Commonwealth Information Warehouse in building queries to access data. To easily and efficiently build a query, the user needs to understand what data is in the Warehouse and how it is organized. This dictionary will provide you with this information. The Data Dictionary is available on-line.

There are two Data Dictionary views:

Data_Dictionary_Elements

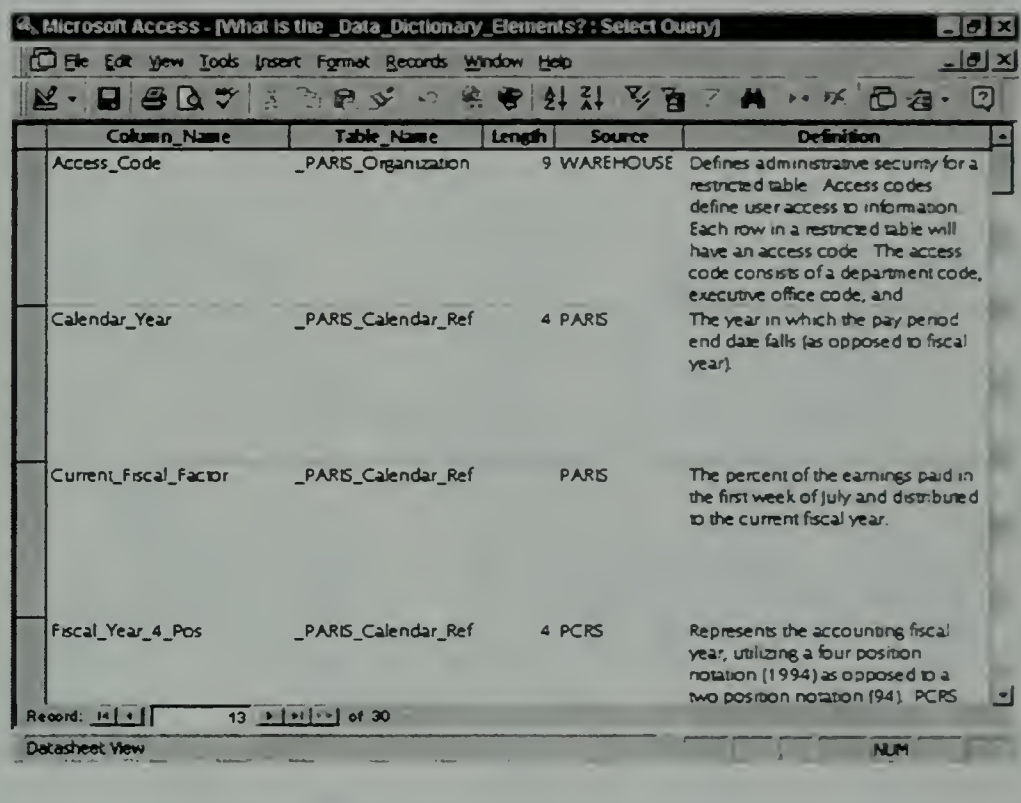
This table lists all data elements (fields) in the Warehouse along with their "in English" definition.

Data elements represent the terms used to designate items of information that exist in the Warehouse, such as

- Employee.
- Organization.
- Social Security Number.
- System Source.

Because some data elements are found in more than one table, a column is included that identifies each table on which a particular data element appears.

Also associated with each element is a field size and a "source" of the data.



Data_Dictionary_Tables

The Data _Dictionary _Table contains information for all table in the Warehouse database.

Tables are composed of one or more data elements. The table definitions are designed to help the used understand what information is included on the table.

When building a query, the user needs to point to the specific table(s) needed.